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CLINICAL LECTURE.

VESICAL FISTULA; FIBROID OF
UTERUS; ETC.

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Case of Vesical Fistula.

The patient before you is 53 years of age, and more than twenty years ago was a patient in the Woman's Hospital. She was operated upon several times by Dr. Emmet for the cure of a large vesico-vaginal fistula. A great part of the base of the bladder had sloughed away. The cause of the fistula was a severe labor, lasting over twenty-four hours, and ended by the use of forceps. I myself was house-surgeon in the Woman's Hospital when she entered, and well remember her condition, which was one of the most deplorable I have ever seen. She was ultimately cured of all but a small cervico-vesical fistula, which remained for many years, but has now ceased to occasion her any trouble. Her complaint now is of slight prolapse of the anterior vaginal wall, and a feeling of pressure on the bladder. When standing or walking for a long time, she has slight incontinence due to cicatricial contraction laterally, in consequence of which the lower portion of the urethra is retracted and its proper functions interfered with. She has not much pain, and ordinarily there is no involuntary escape of urine. But the capacity of the bladder is small, and she has to empty it at least every three hours. She is entirely relieved of nearly all her symptoms by the introduction into the

vagina of a small glass ball, which presses the neck of the bladder somewhat forward.

The case is a very interesting one, as showing what extensive loss of the vagina may be repaired. The patient has been actively engaged most of the time on foot during all the years that have elapsed since she left the hospital.

Fibroid of the Uterus.

This patient is thirty-eight years of age; has had one child and one miscarriage. Seven years ago she began to complain of pain in the back and menorrhagia. On examination we find the body of the uterus apparently about four times its normal size, and we find that the sound passes four and one-half inches, and to the left side. The solidity of the mass is evident to the touch, and it is also evidently continuous with the uterus.

There are several ways of treating these cases; we are guided largely by the symptoms, by the size of the tumor, and by the age of the patient. This woman has not much pain, and complains chiefly of the excessive loss of blood at every period. We naturally suspect that this elongated uterine canal contains fungoids, and we satisfy ourselves of the fact by passing the blunt curette. Now, if we carefully scrape out all these granulations, and apply strong tincture of iodine to the surface, the hemorrhage will be arrested, and the patient will be relieved for three or four, or perhaps for six, months, though of course the condition is not otherwise benefited. If the woman were ten years younger, and the tumor were growing rapidly, more heroic treatment would be demanded. But if she can hold out a little longer, until the menopause, the

tumor will cease to grow, and may perhaps diminish in size. It is worthy of note, however, in this phase of expectant treatment, that the menopause is often delayed for several years on account of fibroid tumors. Medicines have very little effect upon these growths; but, in some forms of tumor, where the uterine tissue can act upon the neoplasm, the use of ergot tends to check the hemorrhage. The application of iron or other styptics is of no use whatever. The internal administration of quinine and of iron tends to increase the flow.

In case of a younger woman having a similar growth to the one before you, we have several means at our disposal for relief and cure. One to which much attention is now being directed is the use of a powerful galvanic current, after the plan of Apostoli, of Paris, who, when he was in this country, kindly operated upon a case for me in order to demonstrate his method. He passes one electrode of platinum into the uterus, and for the other electrode covers the entire abdomen with a mass of wet clay, much like a flax-seed poultice. Operating in this way, he is able to apply a current ten times more powerful than had formerly been employed for this purpose. This treatment, continued for ten or fifteen minutes, is not painful to the patient, and, if followed by no reaction, it is repeated two or three times a week. The result is a change in the nutrition of the tumor, and a partial arrest of its blood-supply. We have not yet used the method often enough in this country to speak of it with much confidence, but it is certainly worthy of trial. It is entirely different, you will observe, from the galvanic treatment by puncture, in which the object was to bring about by electrolysis a disintegration of a small portion of the tumor.

Passing to the surgical methods, we should first consider the propriety of trying Hegar's operation, which consists of the removal by abdominal section of the tubes and ovaries, the result of which is to bring about the menopause, and thus arrest the growth of the tumor, as it would be normally arrested had the woman reached the age of forty-five or fifty. This method is best adapted to single, rapidly-growing, and vascular tumors, and is less likely to be of advantage in case of multiple fibroids very dense in texture. The operation is not a very dangerous one, provided there are no adhesions; but it often happens that the ovaries and tubes are so attached down to the surface of the tumor that their removal is impossible. In such a case the operator has two courses before him.

He may close the abdominal wound, and the patient will be no worse off than she was before; or he may proceed to remove the body of the uterus, clamping the cervix as a pedicle, and bringing it up to the abdominal wound. This operation has already been done several times in the Woman's Hospital this season, and has already been fully described.

Complete Laceration of the Perineum.

This woman is forty years of age, and has had four children and one miscarriage. The last child was born eleven years ago. Menstruation is regular, but always accompanied with pain. I first saw her about six years ago, when she had a complete laceration of the perineum, having no control whatever over the bowels. I operated upon the perineum at that time, and the operation failed. An operation upon a complete rupture of the perineum is a failure, if the sphincter ani is not perfectly united, and it is a failure if, above the sphincter, there remains the smallest fistula. In this case a small fistula remained. Two years later, the patient being in very much better condition, I performed the operation again, and you see the result before you. The laceration was originally a bad one, a rent extending for some distance up the posterior wall of the vagina. After the second operation, the vaginal wall was entirely united, and the sphincter also; so that now, as she tells you, she has perfect control. I have modified this operation considerably within the last six years, and I believe that I can attribute several failures in times past to the simple fact that I followed the directions given in some text-books, and passed a suture through the margin of the sphincter and completely around the rent in the vagina. This method is very likely to result in failure. A very important point in the operation is to denude a broad surface and bring it together carefully by interrupted sutures. The parts should lie together so easily that there is no tension on the sutures.

Time will not allow the description of this interesting and important operation in detail. I will simply say that for sutures, silver wire is best, though the operation may be done with silk, with catgut, or with silk-worm gut. One point is important as to prognosis: if several years have elapsed since the sphincter-muscle was torn apart, that muscle may be so atrophied that no operation will restore it. This case was an

exceptional one in that respect, the sphincter not having undergone atrophy, though eight years had elapsed.

If the case is a recent one, and the sphincter-muscle very rigid, I stretch and manipulate it between the fingers as much as possible, so as to overcome its tendency to spasmodic contraction after the operation. If, after the sutures in the upper part of the wound are introduced, there is some tension, it is well to relieve it by incisions on the right and left side, otherwise the sutures are apt to cut out. The golden rule in this, as in most plastic operations, is to avoid all tension upon the sutures, which should merely serve to keep the parts in accurate apposition. The bowels should be very thoroughly moved before an operation of this kind, and they should be moved within three days of the operation, and never allowed to become constipated. They should be moved by a mild aperient rather than by enema. Castor-oil is probably the best.

Irritability of the Bladder.

This patient, when she first came to us a few weeks ago, had only one complaint, but that was a very serious one. She could not retain her urine more than an hour at a time, and sometimes, if we may take her word for it, she passed water every fifteen minutes during the day, and about every hour during the night. She had become excessively nervous, and showed marked signs of suffering. We found, on examination, no cystitis, no urethritis, and no tenderness on pressing over the bladder. What was rather remarkable about her case was, that the symptoms appeared rather suddenly during convalescence after a miscarriage. We found, on examination, a marked retroversion of the uterus, which, however, was perfectly movable. Placing the woman on her hands and knees, and making gentle pressure posteriorly, the uterus was put in place; and, wishing to expedite matters as much as possible, a retroversion pessary was introduced at once. The patient returned to say, a week later, that she had been almost entirely relieved, and that she could retain her urine easily for four or five hours in daytime, and during the whole night. She has worn the pessary since, and we shall allow her to wear it, probably for some months to come. The explanation of the symptoms in this case is that the uterus, which had undergone only partial involution, had fallen backward, and by its weight had so dragged upon the bladder as to flatten that organ and greatly diminish its capacity.

This form of vesical irritability is much more commonly due to retroversion than to a mal-position in the opposite direction. Marked antelexion often exists without causing any vesical symptoms whatever.

COMMUNICATIONS.

CONSEQUENCES OF ACUTE SUPPURATION OF THE MIDDLE EAR, WITH SPECIAL REFERENCE TO OPENING THE MASTOID.

BY A. R. BAKER, M.D.,
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The truth of the old saying, that an ounce of prevention is worth a pound of cure, is illustrated nowhere so forcibly as in the treatment of mastoid diseases. It is not altogether improbable that the time may come when the more serious surgical procedures recommended in this paper may no longer be necessary, owing to the early recognition and prompt treatment of mastoid inflammations. Although this is a consummation devoutly to be wished, so long as there is the present ignorance of these diseases among the general practitioners, who usually see and treat them in the early stage, and so long as a running from the ear, or even an earache, is looked upon by the laity as a trifling matter, and so long as the nasal douche and similar appliances are used indiscriminately for treating catarrhal troubles, and so long as no precautions are taken to protect the ears while bathing, we must expect to meet mastoid inflammations, often resulting in serious complications which may require surgical interference to save life.

In order to consider the subject of prophylaxis satisfactorily, it would be necessary to enter into a discussion of the entire pathology, etiology, and treatment of inflammation of the middle ear; but we must content ourselves by saying that "taking cold" must be avoided by daily cold sponge-baths, the avoidance of overheated rooms, the wearing of woolen underclothing in all seasons of the year, and careful attention to secure heavy-soled large shoes. The prompt recognition and treatment of aural complications of the acute exanthemata—especially scarlet fever—are of great importance. The use of the nasal douche should be abandoned. Great care should be taken, when any perforation of the membrana tympani exists, to plug the audi-

tory canal with cotton before bathing. All purulent discharges from the ear should be stopped as soon as possible. In any acute inflammation of the middle ear, it should, if pain be present, be syringed with hot water. The naso-pharyngeal cavity should be closely inspected and treated. The Eustachian tube should be kept pervious, and, if any accumulation of pus or serum be confined within the middle ear, the membrana tympani should be perforated at once. If all pain, fever, and tenderness on pressure be not relieved at once by the above measures, leeches should be applied. If all cases be thus treated promptly, intelligently, and skilfully, few cases of serious mastoid trouble will be encountered; but, even with the most skilful care on our part, we will occasionally meet a case of serious mastoid disease requiring more active surgical interference.

The history of the operation for the opening of the mastoid is one of the most interesting in the entire subject of otology. Probably no operation has been the subject of so many fierce debates, at one time receiving the hearty approval of the entire profession, and the operation even prostituted from its legitimate indications—that of providing a means of escape for the retained products of inflammation—to that of an empirical procedure to relieve a symptom: deafness. At another time the operation fell in such disrepute that von Tröltzsch, in 1861, confessed that he would have hesitated to undertake the opening of the mastoid with any instrument but a probe, in a case which he reported, of suppuration of the middle ear, in which Wilde's incision failed to give relief.

There are many surgeons who have been credited with the first performance of this operation, and many of them without doubt deserved credit for their work in this direction; but the honor of establishing this operation upon a firm surgical basis belongs to M. Jasser, a regimental surgeon, in 1776. The details of his first case, as published in the *Journal de Méd., Chim. et Pharm.*, 1793, are so accurate and the indications for the operation so clearly described, that I will give a short abstract of this case.

"A soldier complained of a discharge from his ear. This matter was very fetid, and the patient occasionally experienced severe attacks of fever, accompanied with violent pains, particularly in the right ear. These symptoms were alleviated by blood-letting, laxative and refrigerant remedies, and the application of topical emollients

and anodynes. These symptoms returned frequently, and were always treated in a similar manner.

"The patient came to the hospital again in 1776. He had a violent fever and extreme pain. He was bled three times in the space of two days, gentle laxatives were employed, and emollient injections and vapor-baths to the ear; blisters were placed upon the nape of the neck, and, behind the ear, leeches were applied. All these means were successively used and repeated several times. None of them, however, relieved him. The patient continuing to suffer and being without sleep, opium was occasionally administered.

"Ichorous and fetid pus continued to issue from the right ear. At the termination of three weeks, a soft elevation on the mastoid apophysis appeared. Emollient cataplasms were then applied, and the tumefaction disappeared on the following day. Some days after, it again appeared. At last, it was determined to make an incision in the tumor, an inch long. A few drops of a thin and acrid humor, nothing more, issued from it. Poultices were continued, but the pains were as intense as usual. It was then determined to open the bone, and a sound was introduced into the cells of the apophysis. A pectoral infusion, nothing else being at hand, was injected through the opening by means of a syringe. All the injection issued instantly from the right nostril. The pain abated, and, the wound being dressed in the dry manner, the patient went to bed and slept profoundly during the following ten hours. After dinner, the dressing was renewed and the same injection repeated. The discharge from the ear diminished daily, the odor and color of the matter became better, and in eight days he had neither pain nor discharge. The injections were then discontinued and the wound dressed with dry lint only. The bone was kept exposed for some time; but, as no sanies proceeded from it, a cicatrix was permitted to form, which was completed in about three weeks. From that period, the soldier continued to enjoy good health and felt no pain in the ear."

The intelligent manner in which the case was treated by M. Jasser, more than a century ago, and the good sound surgical principles which guided him in his operation, would be creditable to any surgeon of the present time. But, unfortunately, the operation was soon enlarged, and was

¹ Saissey on the Ear, translated from the French by Nathan R. Smith, in 1829.

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supposed to be useful in the following cases, as indicated by Arnemann, Professor of Medicine at Göttingen, and his followers:

1. When there is complete deafness, or when deafness pertinaciously increases.
2. When mucous fluids which are secreted in the ear remain there and produce congestion.
3. When the ears are painful and there is heard in them a continual ringing.
4. When the Eustachian tube is obstructed by mucous or other fluids which may be removed by injections.
5. For the purpose of relaxing the membranes and other soft parts of the drum of the ear, and thus giving pliancy to the small bones of the ears.
6. When the cells of the mastoid apophysis contain purulent matter, and when they are carious.

In the latter cases, Saissy very pertinently remarks: "The perforation of the mastoid apophysis is infinitely less painful, and the danger is nearly nothing, because nature accomplishes nearly the whole."

The utility of the operation corresponds to its necessity, and it deserves to be preferred to all other remedies. The reasons why it is preferable are so obvious that I think it is useless to designate them.

It does seem that, with such good authority for performing the operation, that von Tröltzsch need not have hesitated to open the mastoid, even with other instruments than a probe. The indications for the operation are so clear in these cases that it seems that no one should hesitate, while in all the other indications, as formulated by Arnemann and his followers, it is as clearly contradicted. It could not possibly do good, and might do infinite harm. But it seems as though some evil genius held sway in the minds of the physicians who have had to do with this operation, urging them to perform it for all kinds of ear-diseases, and then, when some unfortunate accident, as the death of the Danish physician Beyer, who had it performed upon himself for the relief of a chronic proliferous inflammation of the middle ear, occurs, the operation is condemned in all cases and under every circumstance. While I have been a most enthusiastic advocate of the operation, and believe that hundreds of lives have been saved by it, I regret to say that I know of a case having been operated upon, within a few months, for the relief of deafness, and, when no relief was afforded, my published papers were quoted as sanctioning it. A gentleman called upon me, about two years

since, for a continual ringing noise in the ear; he also complained of some dizziness and deafness, and insisted upon having an operation performed. I refused, assuring him it would do no good. He then consulted a general surgeon, a man of brilliant attainments—a keen surgical mind—who perforated the mastoid; of course, with no benefit. Now, it is such operations as these that bring it into disrepute. If surgeons only kept in mind the fact that it is not an operation to cure deafness, to cure dizziness, to cure pain, to cure any symptom (although it may incidentally cure all of these), but it is an operation to evacuate retained pus or remove dead bone. I may illustrate, in a crude manner, the object to be gained, upon this skull.

We have here the middle ear in close relations with the cerebral cavity above; the external auditory canal on the outer side, separated by the drum membrane; the amifis of Eustachian tube in front, and the mastoid cells behind.

Now, suppose this large cavity is filled with a purulent secretion; it must escape into the middle ear by a more or less contracted opening, and from there into the external ear through a perforation in the membrana tympani, or possibly through the Eustachian tube into the fauces. Now, what operation is more clearly indicated than to open directly into these cells at this point, and evacuate this purulent matter? The necessity of this procedure is doubly called for, because this focus of purulent secretion is in such close relation with so many important structures. There is above the brain, separated only by the merest shell of bone, often fenestrate in the normal condition. We have in front all the important structures of the middle ear. We have behind and on the inner side the transverse sinus, and on the lower side the jugular vein. The internal carotid artery and the facial nerve are also in very close relation, and not infrequently involved in the inflammatory action.

Some of the most frequent causes which lead to death as the result of mastoid diseases are caries and necrosis of the temporal bone, purulent meningitis, cerebral abscess, pyemia, septic phlebitis, thrombosis, and embolism. I have discussed this subject at some length in a paper read before the Northwestern Ohio Medical Association, and published in the January No., 1888, of the *Cleveland Med. Gazette*, in which I said that "I wish I could impress upon your minds the fact that, excluding the few cases

as the result of traumatic causes, cerebral abscess in the young or middle-aged is almost always the result of chronic purulent suppuration of the middle ear. It seems to have been one of the slowest lessons the medical profession has had to learn, that, when a collection of pus was found in the brain after death, it was a pathological process extending inward, instead of pus formed primarily in the brain and endeavoring to find its way outward. The ease with which an inflammation can be propagated from the middle ear to the meninges, and thence to the brain-substance, can be easily understood by a consideration of the anatomical points involved. The only wonder is that more people do not suffer from meningitis and cerebral abscess. But nature seems to have been leniently disposed toward us in this matter, and, so long as there is a free opening for the discharge of pus, serious brain-lesions are comparatively rare; but, let the outlet be closed, and we immediately have serious trouble. I surmise the frequency of death from cerebral abscess and purulent meningitis is very greatly underestimated by physicians in private practice, where post-mortem examinations are comparatively rare. I have collected notes of over fifty cases of this kind, from various sources, in which post-mortem examinations have proved that death resulted from the consequence of suppuration of the middle ear, either from cerebral abscess or purulent meningitis, and this list could be indefinitely extended by reference to hospital reports and the periodical literature of the past few years.¹

"Deaths from pyemia, septic phlebitis, thrombosis, and embolism are not infrequent. The transverse sinus is the most frequently affected where it traverses the temporal bone on the inner side of the mastoid process. At this point it is in very close relations to the mastoid cells; but the superior petrosal or cavernous sinuses may be involved, and, when there is a fissure in the lower wall of the tympanic cavity, the jugular vein is very liable to be affected.

"These cases run a very uncertain course, but usually terminate fatally. Death occurs frequently within a day or two, with symptoms of cyanosis and collapse. At other times, the course of the disease is a chronic one. There may be chills, followed by long periods of comparative good health; there may be metastatic abscesses and all

the series of symptoms of pyemia from other causes."

The indications for opening the mastoid process, as most recently stated, may be summarized as follows:¹

1. Purulent inflammation in the mastoid process appearing in the course of suppuration of the middle ear when persistent severe pain in the bone cannot be subdued by the application of the ice-bag, leeches, or by Wilde's incision. (Schwartz.)

2. Painful inflammation in the mastoid process occurring in acute and chronic suppuration of the middle ear, in consequence of growths filling up the external meatus or the tympanic cavity. When attempts to remove the obstacle to the free escape of pus have failed, the operation is imperative. (Grünig.)

The operation is indicated even though the soft parts over the mastoid are not swollen or infiltrated. (Politzer.)

3. When the posterior superior wall of the meatus is bulging, and when, after incision, the abscess is not emptied, and the symptoms of retention of pus continue. (Toynbee, Duplay.)

4. Persistent pain and tenderness in the mastoid process, lasting for days or weeks, in which there is probably an osseous abscess not communicating with the tympanic cavity. (Politzer.)

5. In every suppuration of the middle ear combined with inflammation of the mastoid process, in which fever, vertigo, and headache are developed during the course of the affection, which may indicate a dangerous complication. In such cases the indications for the operation are vital. (Politzer, Roosa, Buck.)

It will be seen there is no allusion to deafness, noises in the ear, dizziness, etc., and I will repeat once more that the indications are simply for the evacuation of the products of inflammation and the removal of dead or carious bone. I will grant that there may be cases in which it is impossible to say whether there is retained pus or carious bone; but, if the symptoms are at all alarming, the surgeon would be justified in giving the patient the benefit of the doubt by making an exploratory operation.

There is much diversity of opinion as to the proper time to perform the operation of opening the mastoid. In a given case of acute inflammation of the mastoid, I have

¹ See Politzer on Diseases of the Ear, p. 526; Roosa, Treatise on Diseases of the Ear, Table of Fatal Cases, p. 554.

¹ See article by the writer, on indications for opening the mastoid process, in the *Cleveland Med. Gazette* for February, 1886.

been in the habit of pursuing the following plan of treatment: When the first indication of pain and tenderness appears in the region of the mastoid, leeches are applied, and the ear is syringed frequently with hot water. If the pain continues and there is noticeable swelling over the mastoid, Wilde's incision is made down to and including the periosteum, and hot poultices applied. In the vast majority of cases this is all that is necessary, especially if the throat and ear are properly treated, and a free exit of pus maintained by the diligent use of Politzer's bag and the syringe.

Of course, if there is any obstruction to the free discharge of pus due to infected serum, polypi, exostoses, or any other cause, it must be removed. If the pain continues and the swelling is not promptly relieved by Wilde's incision, no time should be lost in perforating the bone, as the dangers from delay are many.

The necessity for prompt action is as urgent, and the indications for its performance somewhat similar to that for the opening of a felon. Delay in the one case may result in the loss of a finger; in the other, of a life.

As this is an operation that every general practitioner may be called upon to perform, owing to the necessity for immediate relief many times before skilled assistance can be secured.

If you will pardon me for appearing pedantic, I will describe somewhat minutely the manner of performing the operation, and exhibit a few of the instruments made use of.

In making Wilde's incision, any stout sharp scalpel will answer all practical purposes. The incision should be made from below upward, so as to avoid any danger of injuring the structures in the neck. Anyone not having experience will be surprised to find how deeply the bone is situated in this region, especially if the tissues are swollen and infiltrated. It is not necessary to avoid the posterior auricular artery, as the course of this vessel is so variable that you will probably not succeed. The free hemorrhage is salutary rather than otherwise, and can be controlled by pressure if necessary. The incision should be made close to the auricle, an inch and a half in length, and connected with a shorter horizontal one slightly above the linear temporalis. The teguments, together with the periosteum, are then reflected backward and downward, placing the entire mastoid under inspection. If any sinus exist, they

will be readily discovered, and the operation will consist in simply enlarging the existing opening. Formerly trepans were used for perforating the bone, and these were replaced by drills, which are still used by Buck, Jacobi, Lucae, and a few others. But, owing to their soiling the wound with splinters, and the difficulty with which they are controlled when advancing in the deep parts, I very much prefer the chisel, as recommended by Schwartz. The drills always seem to me like dangerous instruments; if, unfortunately, the cerebral cavity or one of the sinuses be perforated, it would be almost impossible to avoid wounding the meninges, while, with the chisel, little or no harm would result, as every step of the operation is under the eye of the surgeon. It is generally necessary to administer an anæsthetic, although I have performed the operation several times without doing so. The linea temporalis and the more or less strongly developed protuberance on the posterior superior orifice of the osseous meatus, so strongly urged by authors, are very nice guides theoretically, or to point out an exceptional skull in the class-room, but practically are seldom well enough developed to be of any use to the operator. The best guide is to take the superior wall of the meatus as the upper boundary, and the angle formed by the plane of the mastoid with the posterior wall of the external meatus for the anterior boundary, when opening the mastoid. This is best determined by pressing the finger into the meatus. Often in children, and when the bone is diseased in adults, the cortical plate of bone can be removed with the hand-chisel, and we come at once upon the pus-cavity, or diploë, or cholesteatomatous epidermic masses, or a sequestrum of dead bone, or bleeding granulation-tissue, or whatever the case may present. Sometimes the external plate is very thick, and we have to chisel our way carefully for almost an inch before reaching the diploë, or may even find the entire mastoid process sclerosed.

No absolute rule can be given as to the depth it is safe to penetrate. Schwartz says "Never go deeper than 25 mm." Buck says "It is better to place the extreme limit at 20 mm."—about three-fourths of an inch.¹

Occasionally in old chronic cases the entire mastoid process will be found sclerosed and of ivory hardness. In these cases it is not best to seek for mastoid cells which do not exist, but endeavor to penetrate the

¹ Baker. Cleveland Med. Gazette, Feb., 1886, p. 168.

aurum mastoidum, and thus reach the middle ear; but even this may be gained only with great difficulty, and, unless there is some obstruction to the free escape of pus through the external meatus, which cannot be removed, it is often best to desist from further attempts to reach the middle ear when this condition is found to exist.

In addition to the chisels, a bone knife with a concave cutting-edge for enlarging the external osseous shell, a sharp spoon for removing the granulation-tissue, diploë, etc., a few blunt and sharp pointed hooks, dressing-forceps, probes, ligature, etc., such as are found in any pocket instrument-case, will be required; also a good syringe and a carbolized bichloride, or whatever antiseptic solution the surgeon is in the habit of using. I prefer powdered iodoform dusted into the wound to any other dressing, and, instead of the various drainage-tubes or lead nalls so highly recommended by some, I use a simple piece of cloth well saturated with iodoform.

I am aware that this is considered by many a serious operation, and Politzer has said "that no one should operate on the living without having performed the operation at least forty or fifty times on the dead." Yet I believe that no physician should permit a patient to die, from the consequences of acute suppuration of the middle ear without first giving him the benefit of this operation, as the indications for its performance are so imperative.

MORPHINE AS A CAUSE OF ACNE ROSACEA.

BY CHEVALIER Q. JACKSON, M.D.,
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Rosacea, one of the most common of the dermatoses, is attributed, by dermatological writers, to certain reflex vascular disturbances of the facial circulation, consequent upon stomachal, intestinal, and uterine derangements. While this is true in a certain proportion of cases, there are many which consult the dermatologist in which no such disturbance exists. In a large number of the latter class of cases, I have found the morphine habit, which, at the present time, is so startlingly prevalent, to be the chief etiological factor. Since I first observed this, a number of cases have come under my observation, in which the rosacea was directly attributable to the use of this narcotic. As all these cases were very similar, it will serve my purpose sufficiently well to give the condition and clinical history of the first three.

Case 1.—M. M., 25 years old, a book-keeper by occupation, came to my office for the treatment of a marked outbreak of acne rosacea, involving the integument of the nose and a small portion of the face. On questioning him, I learned that the trouble had commenced about a year previously, in the form of a most severe pruritus. A few months later, there appeared a faint red blush, with sometimes a single isolated papule. This condition at that time was not constant, being unpleasantly prominent only after a more than usually excessive indulgence in morphine, or after a prolonged spell of cold inclement weather. It was usually accompanied by more or less seborrhœa, and was soon followed by a permanent redness, with gradually dilating capillaries, together with a swollen and more or less pustular condition of the dermal glands—as the patient himself expressed it, "mattery pimples."

At the time he came under my care, the disease was well advanced in what has been somewhat arbitrarily called the second stage of the disease, and, had it not been arrested, would, in all probability, have shortly crossed the arbitrary and ill-defined line into the third stage, for there was already present extensive thickening and infiltration, together with a decidedly hypertrophic condition, together with incipient tendency to lobulate, round, elastic outgrowths. The glands were enlarged, swollen, pustular, and slightly painful, with here and there large comedones. The vessels, enormously dilated, were to be seen ramifying in every direction, the morbid process extending, however, but little beyond the nose. The parts were warm to the touch, and would often, after exposure to sudden changes of temperature, become purple. A section cut from near the ala nasi showed, on microscopic examination, a markedly thickened mucous layer, infiltrated with inflammatory new formation, while the epithelial layer, on the contrary, was much thinner than normal, being almost absent in some locations. The walls of the vessels cut in section were much hypertrophied.

In searching for the cause of the local morbid process in this case, I ascertained that he was a total abstainer (which I had good reason to believe, as far as alcohol was concerned), and that he had had no gastric disturbance until a few weeks before he consulted me. The entire alimentary canal was in fairly good condition, with the exception of some slight constipation, of which he had relieved himself by an occasional Seidlitz

powder. His general appearance indicated average health, save for a constant nervous movement of the eyeball and markedly contracted pupil. These two latter facts, together with the fact that the trouble had commenced with a severe pruritus, led me to make inquiries to ascertain if the patient was addicted to the use of opium or its alkaloid. This he strenuously denied, until, under the pretense of wishing to look for the eruption on other portions of the body, I had him remove the clothing from his lower limbs, when I discovered that a portion of the anterior surface of the left thigh was dotted here and there with small papular and pustular elevations, which, after slight hesitation, the patient acknowledged to be the result of the use of the hypodermic syringe. He stated that for a year and a half he had been in the habit of injecting morphine subcutaneously into his thigh every night at bedtime. At first, he took in this way one-eighth of a grain; later, he increased the quantity to a quarter-grain, which dose he had not exceeded. He claimed he had only injected the drug once daily, and that always at bedtime, which accounts, probably, for the absence of stomach trouble. The patient also stated that he always took a cup of strong coffee in the morning before rising, which would further tend to neutralize the tendency of the morphine to cause nausea and gastric irritability. The papules and pustules spoken of above as being produced at the point of injection may have been due to the crude and ill-made rusty needle used, or to dirt, lint, oil, or other foreign matter being injected; or, as I have occasionally seen, to an idiosyncratic sensitiveness of the skin to morphine, which manifests itself in a papule at the site of injection.

Acting on the theory that the morphine was the cause of the rosacea, I directed the patient to abandon its use gradually during a period of not less than two months, reducing the amount taken by one-sixteenth of a grain at regular periods of two weeks, meanwhile having him take sufficient doses of the bromides to enable him to sleep, giving him during the day full doses of caffeine, with the hope that it would counteract the effect on the rosacea of the morphine he was taking. During this time, no local treatment was instituted.

At the end of the two months, the condition of the rosacea was markedly improved; the color had become paler and the acne papules had almost disappeared. The patient was now compelled to give up

entirely the use of morphine. The bromides were continued for two weeks and then stopped. At the end of four months after having stopped the morphine, all that remained of the rosacea was a few scars, with some slight hypertrophy and a number of dilated capillaries. The hypertrophy was removed by daily applications of the galvanic current, and the enlarged vessels were obliterated by electrolysis, using the needle with which superfluous hair is removed.

Case II.—A. E. W., 35 years old. The course of the rosacea, in this case, was very similar to that of the first case, except that it was much slower in development, and that the morphine was taken by the stomach, in smaller doses, and from twice to three times daily. The skin of the nose was somewhat thickened and infiltrated, but there were few acne papules, and altogether the disease manifested itself in a much milder form than in the preceding case.

I placed this patient under the same restrictions as to morphine, reducing at first the quantity taken at each dose, and finally the number of doses daily, until the habit was entirely abandoned. I refrained from all treatment in this case, save a simple placebo given internally. In a remarkably short time, the cutaneous tissues commenced to resume their natural appearance, and continued steadily to improve until, at the end of three months, the affection had disappeared, except a slight erythema, extending over a portion of the area originally covered by the disease. This erythematous condition of the surface has since disappeared under simple local treatment.

This patient stated that he had never suffered with gastric disturbances, stating that his appetite was always good, with little or no constipation, and a very thorough search failed to indicate any other cause than the morphine for the typical rosacea which existed when I first saw him.

Case III.—Mrs. —, 24 years old. This woman, an actress, had been using morphine for a number of years, but never continuously until recently. Some time before the appearance of the rosacea, she had commenced taking the drug for the relief of a very severe dysmenorrhœa, from which she suffered severely up to about a year before she consulted me. She would take the morphine hypodermically during a week, commencing two days before she was unwell, at which time the pain made its appearance. Shortly after beginning the use of the drug, she was troubled with a severe itching of the

nose, which, at first, continued only through the week during which she used the narcotic, disappearing in the interval during which she took none. But, by degrees, the pruritus began to linger for a gradually increasing period of time, until it was almost constant. At the same time, the sebaceous glands began to enlarge and take on an inflammatory condition, forming papules and pustules. This condition was always much ameliorated, and would, at times, almost disappear, in the interval between the periods, only to return at the next menstruation, if she took morphine. She herself had noticed that, when she took chloral instead of the opium alkaloid, the rosacea did not show the least exacerbation; and she would have used the former drug, in preference to the latter, if it had had sufficient anodyne qualities to relieve the pains of the dysmenorrhœa, which finally became so intense that she was led to consult a New York gynecologist for permanent relief. As nearly as I could learn from the patient, he told her she was suffering from anteversion associated with a narrow contracted canal. He used forcible dilatation, under an anæsthetic, which entirely removed the dysmenorrhœa, since which time (about a year before I saw her) she has menstruated regularly, without any pain whatever, or any symptom of uterine disturbance; and a periodical examination, made every two months during the year by the same gynecologist, failed to discover any trace of an abnormal condition of any kind. During this period, however, the rosacea had not been improving, but, on the contrary, was rapidly developing lobules and becoming more and more disfiguring, which the patient herself thought was due to the morphine, the use of which she was unable to discontinue, although the pain had disappeared.

At the time I saw her, the condition of the integument indicated a most marked case of acne rosacea, gradually developing the symptoms which indicate the third stage.

As she was too confirmed in the morphine habit to be broken of it by any other means, I had her husband place her in a private hospital for the treatment of opium habitues, with instructions that she should have absolutely no treatment whatever, save the regular house treatment, to overcome the cravings of the system for the narcotic.

Three months later, she came into my office, with a nose of which she said she was not ashamed. Upon examination, I found that all that remained of the original disfigurement was a number of scars and a

slightly hypertrophic condition of the skin. There also remained a few dilated capillaries and some stout bristly hairs that had commenced to develop, owing to the increased nutrition of the parts. These I removed, together with the dilated capillaries, by electrolysis.

Now, the history of these three cases indicates so clearly that the morphine had a primary causative relation to the rosacea, that scarcely any argument is required to establish the fact. In the first case, it might be argued that the drug was only indirectly the cause, acting simply by creating gastric, intestinal, and other disturbance which, in turn, produced the skin-affection, were it not for the fact, which I stated before, that all the functions were not interfered with by the drug, which was probably due to the manner in which it was taken.

In the third case, it would be possible to attribute the rosacea to uterine derangement, were it not for the fact that the removal of the dysmenorrhœa did not in any way benefit the condition of the nasal integument, which continued to grow worse as rapidly as before. Surely, if the morbid process located in the skin of the nose was due to the uterine trouble present, the removal of the latter would cause the rosacea to disappear. I am aware that it will be argued that there may have remained some remnant of the former uterine trouble to keep up the reflex irritation; but, if such existed, it failed to show itself in any symptom whatever. There was not the slightest endometritis, cervicitis, erosion, displacement, or any abnormal condition, ovarian, tubal, vaginal, uterine, stomachal, nervous, or intestinal. The patient did not "touch, taste, or handle" alcoholic liquors of any kind; was neither anæmic nor chlorotic, being plump and healthy save for an abnormal paleness of the skin (except on the nose) and the contracted pupils.

In all these cases there was a marked pruritus, commencing before the appearance of the eruption and continuing during the progress of the trouble, to a greater or less extent. This pruritus is seldom if ever present in any appreciable degree in rosacea from any other cause, but is an almost constant physiological action of morphine. The itching causes the patient to rub, scratch, and otherwise irritate the parts, thus causing an inflammatory condition of the surface, which would, perhaps, to some extent, tend to the development of a rosaceous condition. I am certain, however, that morphine, when taken into the system, has a

direct selective action on the nasal integument. The fact of its producing pruritus at this point, and so very slightly or not at all over the general surface, indicates this.

I have now under my care three cases of eczema rubrum, in which a small dose of morphine, given three or four nights in succession, will produce a crop of acne papules, with a pruritic and erythematous condition of the skin of the nose.

On mentioning my ideas on this subject to a medical friend of mine, he told me that he occasionally took a quarter-grain dose of morphine, while traveling, to enable him to sleep on the cars, and that it almost invariably produced a bright red papule, very sensitive to the touch, and so disfiguring as to lead him to substitute for morphine paraldehyde, although the former was so much more inconvenient to take.

These facts, all taken together and viewed in conjunction with the above-described cases, indicate, I think, very clearly, that morphine has a direct action on the blood and nervous supply of the nose. Whether this action is through the vaso-motor, sympathetic, or general nervous system remains to be investigated. My own opinion is that it is due to the passive hyperæmia produced by the drug. The well-known physiological action of morphine is to lower arterial tension, dilate the arterioles, and produce this passive congestion, which is always present in the early stages of every case of rosacea, from whatever cause produced. Following this passive hyperæmia would be the inevitable reaction, which would produce the sensation of pruritus the same as the reaction from excessive cold. Further, this condition of passive congestion, if kept up or frequently renewed, would certainly lead to an altered condition of the nutrition of the parts, causing hypertrophy and other symptoms of rosacea, entirely independent of any local direct irritation by rubbing the nose for relief of the pruritus; this mechanical irritation, however, probably aids in the causation of the pathological processes.

As it is not always possible to elicit from the patient a confession of the use of opium or morphine, the fact will usually have to be arrived at from the general aspect of the patient. Dilated blood-vessels and other objective symptoms, together with the subjective symptom of marked local pruritus, are usually the first manifestations of the disease. This is in marked contrast to ordinary rosacea, in which pruritus never occurs to any appreciable extent.

In any case of this most obstinate malady,

a cure always depends on the discovery and removal of the exciting cause, and, as this is often difficult to discover, any light thrown on the subject will always be welcome, not only to the dermatologist, but to the general practitioner as well. Let this be my apology for presenting this paper.

ON THE TOXICITY OF THE "FRUIT JUICES."

BY W. H. MORSE, M.D.,
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It is not alone in alcoholic liquors that fusel oil is an available poison, though, for obvious reasons, the fact is one that is not of general recognition even by physicians. The chemist does not need to be told that the poisonous oil is afforded in much of the cheap "soda water" and confectionery. There is just ground for placing not a little of the "soda water" in the same category with the "rot-gut" whiskies of the saloons. Not that it enters into the composition of the carbonic-acid water commonly known by the name of "soda water"—an allegation that any manufacturer would be justified in denominating a distinctive label. The trashiest stuff sold at the soda fountain would not merit such a charge; indeed, the toxic water is more apt to be the article dispensed from the most reputable and "fashion-patronized" fountain, though it is, as well, dispensed at the "cheap-john" stand and the three-cent-a-glass stores.

It is made an ingredient by the flavors of the water—the "pure fruit juices" of the able manufacturing chemist. What is a "pure fruit juice" or a "fruit essence"? Looking at the matter casually, the innocent consumer would be ready with but one reply: "A 'fruit juice' must be the juice of a fruit." That is one way of looking at it. It is true that there are the juices of fruit which are used as "fruit juices," but I think that I do not err in stating, upon a recent estimate, that, for every pound of the real juice that is used in the drug-stores, there are used from 60 to 100 pounds of artificial "juices." These comprise a large list: strawberry, raspberry, pineapple, wild cherry, peach, prune, orange, elderberry, fig, currant, blackberry, raisin, several varieties of grape and pear, quince, cranberry, lemon, lime, apple, and, in fine, "any fruit desired."

There are many kinds of these factitious preparations, but practically the varieties are but two, namely: those in which amylic

alcohol is used, and those which employ the ethylic. This is explained in this way: Several of the compound ethers possess the odor and flavor of certain fruits. Present in these compounds are the two simple ethers known as the ethylic and amylic. Each of these has a base and an alcohol; that of ethylic ether corresponding to ethylic alcohol, and that of amylic ether to amylic alcohol or fusel oil. Chemically speaking, these alcohols are, respectively, hydrated oxides of ethyl and amyl. It will therefore be apparent that the essential bases are the alcohols; and obviously—for commercial reasons—the amylic alcohol has the precedence, and is at once the most common and the most culpable of the two artificial preparations.

I happen to know—and the knowledge is scarcely of a kind to be a matter for pride—that the manufacturer prefers the amylic alcohol, arguing that it “works” better than the ethylic, and is “cheaper.” Let us look at the “inner workings” of this manufacture.

Take, for instance, a few of the most popular juices. Pineapple juice contains ten parts of butyrate of amyl; strawberry, two of butyrate and three of acetate of amyl; raspberry, one of each; apple and lemon, ten each of valerianate of amyl; orange and pear, ten each of acetate of amyl. Other juices are “all of a kind.”

The genesis of acetate, butyrate, and valerianate of amyl is chemically suggestive. The first-named is prepared by distilling one part of fusel oil or rank amylic alcohol with one of concentrated sulphuric acid and two of acetate of potassium, subsequently freeing from free acid and water. The valerianate is made by mixing four parts each of amylic alcohol and sulphuric acid, adding five parts of valerianic acid, and subsequently washing and purifying.

The acetate of amyl possesses in a most remarkable degree the taste and smell of the Jargonelle pear, and it is an alcoholic solution of it that forms the “pure juice of the Jargonelle pear.” Add, to 15 parts of it, one-half of one part of acetic ether, and in 100 parts of alcohol it forms “bergamot pear juice.” Substitute butyric for acetic ether, and the solution is “banana juice.” Again, an alcoholic solution of valerianate of amyl, in the proportion of one part to six of alcohol, forms “apple juice.”

On the other hand, the acetate, the butyrate, and valerianate of ethyl are employed in the same kind of manufacture, but the essence or “juice,” having the oxides of

ethyl as constituent of their bases, are “weak.” By this term is to be understood a lack of popularity—poor sellers, unpopular. Of this kind are such “juices” as melon, plum, gooseberry, grape, peach, and cherry, all of which contain the ethylic and lack the amylic oxides. To instance more particularly: One part of butyrate of ethyl in six to ten of alcohol forms “pineapple juice.” This “juice”—together with “quince,” one part pelargonate of ethyl in six of alcohol—constitutes the only popular “juice” of the ethylic series. But the “pineapple juice,” it must be remembered, contains, nowadays, ten parts of butyrate of amyl to five of butyrate of ethyl, constituting the “improved juice.”

Inquiry made of forty-seven New York, Philadelphia, Boston, and Cincinnati manufacturers of artificial juices, or, in the parlance of the average advertisement, “pure fruit juices,” resulted in obtaining the following list of twelve “leaders”: Pineapple, strawberry, raspberry, grape, apple, orange, pear, lemon, cherry, plum, apricot, and peach. One hundred and sixteen druggists were asked to “signify which of these twelve were the best sellers at the fountain.” I will not give the lengthy “vote” in detail, but it will suffice that I found, in summing it up, that the favorite flavors with customers were as follows: Pineapple, lemon, orange, pear, apple, and peach.

It will be noticed that it is alone the peach juice that is popular, of the ethylic juices. There are some new favorites, not included in the list; but, without exception, they have basic amylic oxides.

It should, perhaps, be noted that, in addition to the ethylic and amylic oxides, some of the “juices” contain other minor constituents, as glycerin, chloroform, aldehyde, nitric ether, sebacic ether; salicylate of methyl, certain acids, and three or four ethylic salts of inferior valuation. These ingredients are used in modification, to bring about or preserve more nearly the fruitic resemblance. To procure a “natural color,” certain other chemicals are employed. As to any combination being made with the true essences, I have only to say that orange “juice” does contain ten parts essence of orange; but it is the one solitary instance in kind, though lemon, raspberry, and grape purchase an acid taste with tartaric and succinic acids.

In a burst of confidence, one manufacturer boasted that no one could distinguish his syrups made with artificial juices, from the

official syrups; but, although he made a very good and popular line of syrups, factitious character considered, I had the pleasure of showing him that his lemon, raspberry, strawberry, and pineapple syrups were utterly unlike those which are officially prepared from the fruits after the formula of syrup of lemon.

Three other points were followed out:

1. As to the preference of known alcoholic liquor drinkers.

The favorite flavor with this class was found to be the juices of the amylic series—a significant fact.

2. In the matter of the so-called "soda-water intemperance," as to the preference of those so addicted.

It did not require a very close search to discover that the preference of this class was for soda water flavored with the amylic oxides.

3. As to any preference which physicians have in "prescribing" soda water.

The outcome of this line of research was the discovery that, where medical men prescribed other than "plain soda water," they were "always careful to specify the pure fruit juices." "But if you do not have such?" I asked a prominent pharmacist. "Well," he said, with a knowing wink, "it saves me the doctors' custom, if I'm all out, excepting peach." Peach juice (artificial) does not contain fusel oil.

The plain fact—and ever becoming plainer and plainer as I investigated the matter—was that the artificial had largely crowded the natural juices to the wall, and that, though there are artificial "juices" which are of chemical purity and non-injurious to the health, the favorite artificial "juices" are those which are base with fusel oil. More of these than of the other are manufactured and drunk, and, as a rule, the baser they are with fusel oil, the greater is their popularity. It is also just to remark that these factitious essences are extensively used for flavoring candies, ices, and jellies, to the greater or lesser exclusion of the natural juices; and that, as in the case of the fruit syrups, both manufacturer and retailer prefer those toxic with the fusel oil.

The question will occur: Are we, then, to rank soda water and confectionery which are flavored with a fusel-oil product as of a toxic character? We can make but one answer: A poison is a poison, whatever its dose or form of exhibition. Strychnia, arsenic, fusel oil, or any other poison, is of a toxic character in large and in small doses. The only way to prevent the action

of a poison is to decline it the privilege of acting. The minute dose may not procure any harm, but it is not always of such characterization, and the best plan is to leave it alone altogether. My investigations go to show that the class of fruit juices in question is deleterious, and, if the law for the sale of poisons will not touch the case, there is a statute governing adulteration. The demand should be for pure natural fruit juices, and, next to them, for pure artificial juices. There is no excuse for the manufacture and sale of those that are more or less toxic.

SKETCHES FROM THE NOTE-BOOK OF A COUNTRY DOCTOR.

BY H. J. CRUMPTON, M.D.,
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Gun-shot Wound of the Scalp; Recovery.

A five-year-old boy managed to elevate and fire a loaded gun in such direction as to inflict an ugly scalp-wound on the person of his nurse, about 19 years old, who was stooping over and looking out of an open window. The child was some ten feet behind her. The charge of small shot struck near the posterior inferior angle of the left parietal bone, and, after ploughing a ragged furrow some two inches in length forward and upward along the surface of that bone, glanced off over the top of the head and passed out through the open window. Outside the immediate track of the charge, the scalp was loosened from the cranial bones over quite a surface. The following conversation occurred soon after my arrival: "Is she seriously injured?" "Yes." "Do you consider her dangerously wounded?" "Yes; all such injuries to the head are to be considered dangerous. During the war between the States, a serious death-rate followed what were at first considered simple scalp-wounds." This was not very reassuring; in fact, it was rather exasperating to those present, who saw there was little or no bleeding, and had just been told no shot had penetrated, that the skull had apparently escaped injury other than its denudation and loss of periosteum over not a very large surface. Bystanders said that immediately after the shot the girl showed much alarm; said she would soon die, asked them to pray for her, and soon after passed into syncope. She was in a semi-comatose state when I saw her, half an hour afterward, with feeble

irregular heart-action and labored respiration. She soon rallied, however, under guarded stimulation and friction to extremities.

The hair adjacent to the wound being clipped, the wound was cleared of foreign matter, including a few stray shot; the loosened scalp readjusted, every particle or shred of which, not entirely detached, no matter how badly torn and lacerated, was utilized as a temporary covering for the naked bone, with the hope of avoiding necrosis. Over the wound a compress, retained in place by a properly-adjusted bandage, was kept saturated with

Fluid extract of calendula	2 parts
Whiskey	2 "
Spring-water	4 "

The broken-down tissues with which the "furrow" had been roofed over soon degenerated into a hard shell-like eschar tissue, but remained an admirable covering, hermetically sealing the wound for the first ten days, during which there was not one drop of suppuration or discharge of any sort, little or no tumefaction, and scarcely a blush of inflammation. The pulse and temperature remained nearly normal, and all the conditions as favorable as they could be. On or about the tenth day, a corner of the covering was unfortunately detached, when the process of repair was shown to have progressed admirably. Now, atmospheric air, doubtless loaded with micro-organisms, for the first time gained access to the wound, and this was soon followed by a nasty sanious discharge, with well-marked constitutional disturbance. All this, however, was soon corrected by changing the dressing to a sublimate solution (1 to 2000), with internal administration of a few doses of quinine and iron. Soon all the cap was taken off, thus converting the injured surface into an open granulating wound. The principal dressing afterward was iodoform in vaseline. Everything progressed favorably to the end; professional visits were discontinued on the twentieth day, and the girl soon after resumed her duties. She complained, however, of periodical pain radiating from the seat of injury, and slight ringing in the ears, and dimness of vision. Taking everything into consideration, however, the extent of injury, the absence of suppuration, slight inflammation, continuous healthy granulation, followed by the naked bone being so admirably roofed in by substantial cicatrization, one felt excusable for indulging in a little self-praise, and holding a favorable opinion of the dressings used, sentiments

not largely shared in by any of the household; some of them facetiously called the first a "marigold cocktail." But it is not always a calamity to have one's merit measured by other than his own standard, as we are all prone to lose sight of the healing powers of unaided nature.

Lacerated Scalp Wound.

In pioneer-days, before this territory entered Statehood, two drunken miners ended a fight by one receiving a blow across the top of the head with the blade of a steel mining-shovel, which severed the scalp from the skull over a large surface, so that the scalp was found turned over and hanging down the back of the neck. This was my first case in surgery. In the absence of all ordinary appliances, treatment consisted in pulling the scalp back to nearly its old place, where it was successfully retained—thanks to the suggestions and assistance of a common-sense old sailor present—by tying together tufts of the long dirty hair from opposite sides of the approximated edges of the wound. The latter was then covered with compress and bandage, and kept continuously wet with a decoction of black-oak bark for the ensuing two weeks. During this time, the wound was never uncovered or examined. Union must have been immediate, as there never was any discharge or constitutional disturbance. At the end of the two weeks referred to, the whole nasty mass—everything—down to the shaved scalp, was removed, with some difficulty, when everything was found nicely healed, and the patient soon resumed work. Doubtless the tannin in the oak bark acted nicely as an antiseptic healing agent; but the old stager credited his prompt recovery to the amount of whiskey he used—he had always drunk all he could get.

Enforced Consultation.

In response, once, to a call "to come quick," I found that a primipara—a splendid specimen of womanly vigor—had been in labor twenty-four hours, under the care of her father and an old woman. The old man was a sort of preacher-doctor. He said he never got "stuck" before. He, it seems, gave medicine besides relying largely on prayer-cure. The old woman said she had been a midwife "nigh on to thirty year," and this was the first time she had to have the aid of a doctor. Of course, common gallantry prompted the young practitioner to express himself as complimented to be thus associated with two such

veterans! The sufferer was found to have a well-formed roomy pelvis, and there was an ordinary vertex presentation, so the tedious labor had to be charged to "meddlesome midwifery." Everything was soon over, as was announced by lusty crying of the new-comer. Both did well. The mother expressed gratitude for her prompt relief; but the old couple robbed me of all glory by asserting that they had "jest about fetched her around" before my arrival, but they could not agree as to whether it was the result of the old man's prayers or the old woman's last dose of asafetida.

Not long afterward, the old man had an ugly attack of dysentery. He insisted on being his own doctor and going outdoors to pass frequent bloody dejections, till too weak to travel. After consenting to have me called, as soon as he was scared into remaining in a recumbent position and using the bedpan, in a little while his troubles were over. When, however, an effort was made to draw from him some expression of acknowledgment of my humble agency in his prompt relief, his thoughts were found to be running in a different direction, as shown by his saying: "Well, Doc, I didn't think you'd keer, and I had some truck in the house—some 'intment—which I knowed was bound to fetch it; so I jest rubbed some of it on my fundim-e-n-t, and I felt it tech the spot right away. I knowed it was bound to fetch it."

The Medical Witness.

As doctors and lawyers are grouped together by most laymen as a lot of vampires living off the substance and misfortunes of others, those of the two callings ought to stand together in an alliance defensive, if not offensive; and, usually, medical men do feel kindly toward the legal fraternity. The latter have a queer way, however, of reciprocating, as is shown in their promptness to take charge of blackmailing schemes, sometimes called suits for malpractice, and as shown in their treatment of medical witnesses when dragged into court and subjected to raking cross-fire on the witness-stand. There are cases, however, in which the latter procedure is excusable, as when adolescence rushes in where experience is unwilling to go, or in the case of some medical fledgling assuming to be a medical expert, and willingly—yes, gladly—taking the stand, pregnant with the idea that he has important statements to make for the enlightenment of court and jury. But, when he gets through, it is with a change

of heart: he knows no one has been enlightened but himself, and he has been forced to expose all his ignorances, and not permitted to tell anything about which he has a lucid idea. Once, when younger than now, it was my fate to figure in some such rôle in a divorce case, in which the wife sued her rich husband for a legal separation and alimony. One of her grievances was that he charged that, at marriage, she had gonorrhœa, with which she infected him. My evidence, given with the earnestness and zeal of one strong in the faith that she was a pure, slandered, wronged woman, was to the effect that, shortly before marriage, she was under my treatment for leucorrhœa, an ailment that even an expert might mistake for gonorrhœa; that a husband cohabiting with a wife thus afflicted might take on non-specific urethritis, and I gave it as my unqualified opinion that such were the conditions in the case pending. Well, she got her divorce, but the presiding judge refused to grant alimony, whether by reason of, or in spite of, my medical testimony that functionary never stated. Not long afterward, one who stood high as a nice moral young man called to see me, a picture of wretchedness and woe. He said there was something seriously wrong with his "private parts," he could not imagine what. Upon examination, an effort was made to relieve his mental anguish by the assurance that he could soon be relieved, as it was only a plain uncomplicated case of old-fashioned clap. This announcement was a shock and surprise. He said it could not be—it was impossible. In total disregard of these protestations, it was suggested that he had better tell where he got it, as such information might have an important bearing on treatment; whereupon, after a little hesitancy, he lifted up his voice and said: "Well, Doc, I never fornicated with but one woman in my life, and never would have touched her had you not given her so excellent a character when a witness in her divorce case." Thus the wretch made me a party to his woes, and, as soon as cured, skipped away into the unknown, after beating me out of my fee.

"Such is (professional) life in the far West."

—There were 377 cases of scarlet fever and 66 deaths in New York City during the week ending August 14; and 709 cases of measles and 59 deaths during the same period.

SOCIETY REPORTS.

OHIO STATE MEDICAL SOCIETY.

FORTY-THIRD ANNUAL SESSION, AT COLUMBUS,
JUNE 13, 14, AND 15, 1888.

The President, DR. S. F. FORBES, in the chair.

Mayor Bruck, of Columbus, delivered an Address of Welcome. He quoted the old saying that "the sun shines on our successes and the earth hides our blunders." The successes, he thought, exceeded the blunders very greatly.

Reports of the Secretary, Treasurer, and various committees were made. Also the reports of the delegates to the American and British Medical Associations.

Report of Delegate to British Medical Association.

DR. E. S. MCKEE, of Cincinnati, made his report as delegate to the British Medical Association. He reported his visit one of very great pleasure and instruction. The British Association he found superior to the American in some respects, inferior in a few, and similar in many. Politics play quite as prominent a part in the British as in the American Association, and sectional strifes, he said, were frequent and bitter. The English doctor, as is perfectly natural for an Englishman, thinks himself superior to his Scotch or Irish brother. This shows itself in various ways, among others in the advertisement of various charitable institutions that wish to fill vacancies in their staffs. Their advertisements read to the effect that no Irish or Scotch need apply. This the Irish and Scotch naturally resent. This resentment took the form of a resolution at Dublin, demanding that this practice by English institutions be discontinued, and declaring the qualifications of the physicians of the different divisions of the island to be equal. This produced excited discussion, but, the meeting being held on Irish territory, the resolution was carried through with a cheer. The reports of the various committees on legislation might be thus summed up: "We have done everything possible, and have accomplished nothing." Their efforts in the direction of legislation seem to be about as persistent and fruitless as with us. The endeavors on the part of the committee to secure legal control of the habitual drunkard were especially worthy of notice. The finances of the Association were reported in a solid condi-

tion. The British Medical Association now owns its own property on the Strand in London, where are located the permanent headquarters and the office of the journal. The annual income exceeds the expenditures, and a nice remainder is left each year. The membership of the Association includes the members of all the auxiliary societies, and numbers about 12,000, 1200 of whom were present at the Dublin meeting.

DR. MCKEE then said: "My time was almost exclusively spent in the Section on Obstetrics and Gynecology, but there was quite an amount of good scientific work done in all the sections. The Section on Obstetrics and Gynecology was highly favored in hearing two papers by DR. APOSTOLI, of Paris, on his method of treating fibroid tumors of the uterus and endometritis. He gave a demonstration in the Rotunda Lying-in Hospital, of his method of applying electricity in the treatment of diseases of the uterus. DR. A. V. MACAN, Master of the Rotunda, was President of the section, and, in his fine address, told of the practices and successes in the obstetric art in the long career of this old and famous institution. He made a most excellent executive officer, cutting off the long-winded talker and drawing out the man whose erudition was only equaled by his modesty. Under his command, little time was lost and much work was accomplished. In calling for discussion, he would say: 'Has any gentleman anything *new* to say, *not* simply anything to say?'"

"The meeting was accompanied by a grand succession of social entertainments. We were dined and wined, given suppers, garden-parties, soirées, receptions, balls, and sermons. The British far excel us in hospitalities to the visiting medical brethren within their gates. The Ohio State Medical Society may feel itself honored by the manner in which its representative was received by the British Medical Association. My visit was much more pleasant than had I gone there without my papers as delegate from this Society."

Election of Officers.

The election of officers resulted thus: *President*, P. S. Conner, M.D., LL.D., Cincinnati; *First Vice-President*, Dr. D. Halderman, of Columbus; *Second Vice-President*, Dr. B. M. Ricketts, of Cincinnati; *Third Vice-President*, Dr. A. H. Brundage, of Xenia; *Fourth Vice-President*, Dr. H. M. Brown, of Hillsborough; *Secr-*

tary, Dr. G. Collamore, Toledo; *Assistant Secretary*, Dr. E. C. Brush, Zanesville; *Treasurer and Librarian*, Dr. T. W. Jones, of Columbus. Various committees were elected. So much time was consumed in the elections that it was decided, on motion of Dr. Dudley P. Allen, of Cleveland, that in the future the selection of all officers, except the President, will be left to a committee on nominations, consisting of five members.

The number of invitations given made the selection of a place of meeting for next year rather difficult. Put-in-Bay, Columbus, Youngstown, Canton, and Delaware were presented and their respective merits urged by their champions. After much debate, the selection fell to Youngstown.

The Society was entertained by receptions at the residences of Dr. Starling Loving, Dr. J. W. Hamilton, Dr. W. D. Hamilton, and at the Central Ohio Lunatic Asylum, all of which were very enjoyable.

Dr. Dudley P. Allen, of Cleveland, and Dr. A. W. Ridenour, of Massillon, each read papers upon the Radical Cure of Hernia. The former presented two cases operated upon with successful result. Dr. Ridenour discussed the different varieties of hernia and the modes of reduction.

The experiments performed by Prof. Senn at the late meeting of the American Medical Association were repeated by Dr. R. Harvey Reed, of Mansfield. He injected hydrogen gas into the rectum of a dog, and ignited it as it passed from a tube inserted into the esophagus, thus demonstrating the fact that the ileo-caecal valve is not impassable.

Dr. J. T. WHITTAKER, of Cincinnati, read a paper upon the

Therapy of Tuberculosis.

He commenced with the statement that five-sevenths of mankind suffer, at one time or other, with tuberculosis; that many have it in some form and recover is proved, he said, by post-mortems. One-seventh of the population of the globe die of one manifestation of this disease—tuberculosis pulmonum. On June 13, twelve persons died of consumption in Cincinnati; others of convulsions, meningitis, and different complaints really tubercular. Koch announced his discovery six years ago, and to-day it remains undisputed. Practical results, he admits, have not yet been obtained from it, however, and pulmonary tuberculosis remains as intractable as ever; but no treatment of this disease is scientific which does not refer to the bacillus. Koch has

made the discovery, and it is the duty of clinicians to cure the disease on the basis of the discovery.

The good effects of high altitudes are probably due to increased lung-exercise, as it requires three times as much exercise to breathe at such heights as at the sea-level. Fresh-air gymnastics, as Sydenham said of horseback-riding, bears the bell. Cod-liver oil has done more for consumption than all other therapeutic remedies put together. The food of the highest force-value is alcohol. Alcohol, fresh air, and cod-liver oil are no new remedies in the therapy of tuberculosis.

Boiling for twenty minutes, or corrosive sublimate 1-1000, is necessary to destroy the bacillus of tubercle. Dr. Whittaker then said: "After experimenting for a year, I have reached the conclusion that no inhalation will kill the bacillus, and have entirely abandoned the trial. I have also tried corrosive sublimate by inhalation and by parenchymatous injection without success. I have had a year's experience with creasote, increasing it a drop a day until 25 drops, or even 40, were given daily. Guaiacol has no superiority over creasote. Aline sulphide, the essential principle of garlic, caused more speedy results, but the scent of the garlic was well-nigh unbearable." Dr. Whittaker said he had been experimenting with the oil of black mustard for a month past and had seen some marked improvements, but he thought the time was too short to permit him to speak with authority of this remedy. He hoped some of the gentlemen present would take up the subject and assist him.

Dr. HERRICK, of Cleveland, said he did not believe in the germ-theory of tuberculosis; he thought the bacillus was not the cause, but the result, of the disease. The disease is only a disturbed nutrition; we always find an antecedent disturbance of nutrition in tuberculosis. He took issue with Dr. Whittaker as to his ideas in regard to alcohol as a heat-producer in the body.

Dr. W. J. SCOTT, of Cleveland, said he did not believe that healthy people are liable to contract tuberculosis.

Dr. J. T. WHITTAKER said: "Dr. Herrick must ignore all cultivation experiments. We can introduce the bacillus of tubercle into the body of a healthy animal and produce tuberculosis. Dyspepsia does occur frequently—in fact, in about one-third of all cases; 90 per cent. show ulcer of the intestinal canal. It is very questionable if tuberculosis is ever inherited. This bacillus is a

stumbling-block to the theory of inheritance. It is a vegetable seed. How can an animal tissue cause a vegetable seed? I think the time is not more than a decade distant when we will throw away the stethoscope and make our diagnosis of tuberculosis by an examination of the sputa alone. It must be made a crime not to disinfect the sputa. A man might as well walk the street, firing a loaded revolver, as expectorating tuberculous sputa right and left."

DR. P. S. CONNER, of Cincinnati, read a paper on

Malpractice Suits.

He was especially qualified to speak, having just passed through a suit. He said that, in the great majority of instances, malpractice suits are brought with the intention to rob, a species of blackmail. So long as rascally lawyers and scoundrelly doctors exist, so long also, he said, will malpractice suits have an existence. There seems to be an epidemic of them in Ohio at present. He then read a bill which is in force in the State of New York to protect physicians, surgeons, dentists, and others from speculative malpractice suits. This bill requires that bonds be given equal to twice the amount claimed as damages, in case the suit be lost or dismissed. With such a law as this on our statute-books, he thought we would have all that was needed. Persons will then, he said, be careful how they bring or encourage malpractice suits. Dr. Conner then presented a resolution, which was adopted, requesting that a special committee be appointed to present to the Legislature, at its next session, a bill similar to the one now on the statute-books of New York.

DR. W. J. SCOTT, of Cleveland, reported

Four Cases of Diabetes Mellitus.

They were treated by the diet method recommended by Dr. Pavy at the last International Medical Congress; they were not cured, however.

DR. B. MERRILL RICKETTS, of Cincinnati, read a paper on the

Treatment of Acne.

He had found massage sometimes beneficial, especially when it was accompanied with Turkish baths. Iron, arsenic, and strychnia, he said, are serviceable as tonics. One-eighth grain of arsenious acid given with the elixir of gentian, tr. ferri chloridi with a few drops of hydrochloric acid after each meal, gradually increased until one-half or three-quarters grain is taken daily, is by far the best treatment. As an external

application, a stimulating paste, composed of ichthyol and mollin, should be applied after all sebaceous matter has been removed with an application of hot water. Resorcin with sub-nitrate of bismuth, zinc oxide and mollin, or lanolin, is also good.

DR. WM. T. CORLETT, of Cleveland, read a paper on

Diseases of the Skin, due to Defective Alimentation.

He reported a number of cases and described the treatment.

DR. H. M. BROWN, of Hillsborough, read a paper on

Painless Treatment of Rectal Disorders.

His treatment consisted largely in the use of cocaine. His investigations had proved beneficial alike to his patients and himself.

DR. H. J. HERRICK, of Cleveland, read a paper on the

Contagiousness of Disease.

He did not believe much in the germ-theory of disease, especially as it affects consumption.

LEHIGH VALLEY MEDICAL ASSOCIATION.

Eighth Annual Meeting.

The Lehigh Valley Medical Association held its eighth annual session at Paxinosa Inn, near Easton, Pa., on Wednesday, August 15. About seventy physicians, members, with their invited guests, assembled in the parlor of the inn, while their wives and daughters were enjoying the views from the porches or rambling through the chestnut groves near by.

DR. W. B. ERDMAN, the retiring President, delivered the President's Address, selecting as his subject "The Character and Objects of the Medical Profession." This he presented largely from the negative side. After speaking of the greatness and dignity of medical practice, he said: "He who enters this profession from merely sordid motives, having failed to recognize the principles on which permanent success therein is founded, will either miss the very end he has aimed at and fall by the wayside, or, abandoning all pretense of regular and honorable conduct in his practice, will be swallowed by the maelstrom of quackery." With this introduction, he gave a study of the natural history of quackery, illustrating with very apt historical allusions. The reason of

success of quackery is due to a want of knowledge on the part of the people, and the influence of novelty and mystery which the "isms" suggest. By thoroughness of preparation, honesty of purpose, and integrity of character, the true physician should aid in dispelling this abnormal condition.

The annual address was delivered by Dr. T. J. Mays, of Philadelphia, upon "The Treatment of Lung Cavities." This topic was selected because of its frequent occurrence, and the prevailing opinion that the cavity is beyond the power of treatment. After giving a clear *résumé* of the pathology of the condition, he advanced to the therapeutical portion of the paper. The cardinal principles must be remembered, (1) that it, as well as the disease of which it forms a part, is inherently a process of necrosis, of mortification; (2) that not only its size, but its existence, depends on the degree of local and constitutional resistance. As a rule, a patient with a quiescent cavity is more desirable for treatment than one who has an infiltrated lung. The special indications for treatment were enumerated, as (1) fever, (2) anorexia, (3) wasting, (4) harassing cough and expectoration, (5) loss of sleep, (6) diarrhoea, (7) hæmoptysis. For the fever, antipyrine was given the first place. Ichthyol, administered through a respirator in a strength of twenty-five per cent. aqueous solution, exercises a beneficial effect on the fever by its effect on the inflammatory process in the lung. Alimentation is all-important, but here the cook is sometimes of more importance than the doctor or nurse in so preparing the food that it will be appetizing. The morning cough will continue until the cavity is emptied. A position on the hands and knees, with the head lowered, will often hasten this. For hæmoptysis, the use of the fluid extracts of hamamelis and geranium—one part of the former to three of the latter, in teaspoonful doses every hour or two, or oftener if necessary—was especially commended. The last item of treatment mentioned was pulmonary gymnastics, which should be employed, and, if with proper precaution, benefit will result.

In the executive session, Dr. George N. Best, of Rosemont, N. J., was elected President. The Executive Board was authorized to arrange a meeting during the winter, to be devoted more especially to the discussion of medical subjects. (The Board afterward determined to hold a meeting in Allentown late in January.)

After adjournment, the Association joined the friends on the porches, they having had

a pleasant social time enjoying the beautiful view which the erection of the inn had made accessible. Paxinosa Inn is situated on a hill north of Easton, some six hundred feet above the Delaware River, and affords an extensive view on all sides. The annual dinner of the Association was then served, and, although the members have grown very fastidious because of previous excellent dinners partaken of, all were pleased with the careful selection and proper preparation of the viands served; indeed, before departing, they were loud in their praise of the inn, as to its position, its appointments, its comforts, and its sanitary precautions.

PERISCOPE.

Pneumonia as a Contagious Disease.

In the *Archives générales de Médecine*, July, 1888, Dr. Netter concludes an elaborate paper on the contagiousness of pneumonia. He regards pneumonia as a transmissible contagious disease, and that the contagion owes its activity to specific pathogenic organisms, pneumococci, which multiply in the pneumonic foci and are discharged from the body by the different passages, but are especially abundant in the sputa. He thinks, moreover, that contagion is still possible long after the patient has recovered from the disease. The reasons for this belief are two: first, because the contagious matter resists desiccation, and can preserve its activity outside the human body on the surface of inert bodies to which it adheres; second, because the contagion is not destroyed in the patient after the termination of the pneumonia. Long after the latter—perhaps indefinitely—persons who have recovered still have in their mouths active pneumococci, and it is to the activity of the latter that he thinks we must attribute both the great frequency of relapses and the large number of persons belonging to one family who are often exposed to pneumonia.

Dr. Netter, however, does not believe that rigorous isolation is necessary in pneumonia. He would object to the parents of the patient passing the night in the same room with the sick one, and especially to their sleeping in the same bed. They should be informed, he says, of the necessity of leaving the room from time to time, and of the danger of using linen soiled by the patient.

In hospitals, he says, patients with pneumonia should not be placed in small rooms by themselves, for the contagion is only slightly diffusible. All the published cases

show that contagion has been especially observed in small ill-aired rooms. Patients suffering with typhoid fever, measles, acute diseases of the air-passages, nephritis, and diabetes ought not to be with patients suffering from pneumonia. Hospital life is recognized now as predisposing the most of these diseases to tuberculosis. Dr. Netter believes that this influence can act also in favoring the production of pneumonia.

Inasmuch as the sputum, if not the only, is at least the habitual, vehicle for the contagion, it should be disinfected. Corrosive sublimate has been found efficient for this purpose. He advises that the linen should be subjected to the same disinfecting process as is used for the linen coming from those affected with other contagious diseases. Disinfection of the mouths of patients with pneumonia should by no means be neglected.

Foreign Body in a Woman's Bladder simulating Stone.

At the meeting of the Obstetrical Society of Boston, April 14, 1888, Dr. C. M. Green reported a case of foreign body in a woman's bladder simulating stone. He said that the patient was a young woman of previous good health, who for some time had suffered with frequent and painful micturition. There was almost constant pain through the bladder, which was increased by motion, especially in riding or in walking on uneven surfaces, as in stepping from the sidewalk to a street-crossing. Occasionally particles of gravel were voided, and rarely, minute clots of blood. Examination of the bladder proved very difficult, as the urethra was exquisitely sensitive; but a silver female catheter was passed, and the urine thus obtained found to be alkaline and of strongly ammoniacal odor. On manipulation, the catheter was felt to pass over a gritty mass, which on subsequent bimanual examination appeared to be about the size of a hen's egg. No clink was elicited by the impact of the catheter, but, from the symptoms and other facts mentioned, a diagnosis was made of vesical calculus. After some preliminary treatment, the patient was etherized and a lithotrite passed into the bladder to crush the suspected stone. Repeated attempts failed to enable the operator to grasp the stone, for on closing the lithotrite it seemed to grasp only the bladder wall; finally the operation was abandoned. Thorough washing of the bladder, however, brought away much sand and several small pieces of calcareous substance, and it was decided to

wash the bladder daily with a solution of boracic acid and await further developments, in the belief that what had been taken for a stone must be one or more masses of calcareous matter adhering to the bladder wall.

For four days the patient was much better, and daily washings continued to bring away gritty particles. The next day, however, the urine was very offensive and contained blood and mucus; the patient was unable to sleep, on account of pain and vesical tenesmus. It was then decided to dilate the urethra and explore the bladder with the finger. This being done, the suspected stone was found to consist of a soft rubber catheter, coiled up to the size of a hen's egg, and thickly coated with calcareous deposit. This had been caught in the lithotrite and gave the sensation of catching the bladder wall. No incontinence followed the dilatation of the urethra, and the patient made a very satisfactory recovery. She denied all knowledge as to how the catheter came to have been left in her bladder, and expressed great indignation that some doctor should have been so unskilful; but Dr. Green expresses the opinion that the catheter had been used either by herself or by an abortionist for the purpose of interrupting a supposed pregnancy, and had been ignorantly passed into the bladder and lost there.

In discussing Dr. Green's paper, Dr. Elliot spoke of a case in which, having dilated the urethra, he had found calcareous masses plastered over the bladder wall, and had been unable to remove them with the finger. He therefore crushed off the masses with the lithotrite, but had great difficulty in washing out the bladder. He finally found that the evacuator was clogged with pieces of twisted paper, which proved to be fragments of a paper lamplighter. The lamplighter had evidently been passed into the bladder by the patient, and had become the seat of calcareous deposit, and subsequently adhered to the bladder wall.

Dr. Elliot suggested that for purposes of digital examination the female bladder should be empty of urine, as the finger can then palpate the whole surface. In regard to the use of the lithotrite in such cases, he said, the instrument should be held in a perpendicular position, otherwise it hits the uterus.

In the case just mentioned, recovery was speedy and there was no incontinence; he had used, for dilating the urethra, Hank's dilators first, and subsequently the finger.—*Boston Med. and Surg. Journal*, July 12, 1888.

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CHARLES W. DULLES, M.D., EDITOR.

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Make communications as short as possible.
NEVER ROLL A MANUSCRIPT! Try to get an envelope or wrapper which will fit it.
When it is desired to call our attention to something in a newspaper, mark the passage boldly with a colored pencil, and write on the wrapper "Marked copy." Unless this is done, newspapers are not looked at.
The Editor will be glad to get medical news, but it is important that brevity and actual interest shall characterize communications intended for publication.

A FOLLY WHICH IS ALMOST A CRIME.

In the reports which the daily papers give of a camp-meeting held recently near Philadelphia, we read that a certain person, only twenty years old, and known as the "boy missionary," was to be married, on August 15, to a girl of the same age, and soon after to proceed to Africa as a missionary. The boy missionary and his intended wife are both said to be small, and the bridegroom to be delicate. The marriage seems to have been approved by the boy's clerical superiors, and to have aroused no opposition whatever.

We cannot, however, permit the occasion to pass without notice. Medical men have a duty to perform to their fellow-men beyond that of trying to get them well when they are sick. It is quite as much their office to warn their fellow-men of dan-

ger to their health and lives, and, if need be, to endeavor to dissuade them from doing what is likely to lead to unfortunate physical results. The case of the boy missionary, therefore, suggests a decided remonstrance against an act of folly which, from the physician's standpoint, is almost a crime. It is bad enough for immature persons to be joined in wedlock; but it is worse when one of two such persons is so frail as to be spoken of as "delicate." Add to this the intention of going to such a country as Africa, and what can medical men think of the prospect? If these young enthusiasts do not lose their lives very soon, what can be expected as the result of their conjugal relations? If they have any progeny, how can this progeny be other than ill-developed and unable to maintain the struggle for existence? This is a question which will rise naturally in the mind of medical men, and which should have been considered by the advisers of this couple. For the young people themselves, we have only pity; but for those whose age should have given them greater wisdom, we have only condemnation. Unfortunately, they have some justification in custom and precedent; and, for this very reason, we seize the present occasion to sound a note of warning.

Unwise marriage is one of the most fruitful sources of deterioration of the human race. Were it not that material prosperity and a continually increasing knowledge of the conditions of health tend to improve the race in this country, we might well fear that our customs in regard to courtship and marriage would soon ruin it. It is for others to speak of the considerations of social and mental fitness for marriage: it is for us, as medical men, to instruct our fellow-men in regard to the conditions of physical fitness. That these conditions are not regarded, as a rule, the slightest observation shows; and the effects of this neglect are known to every practitioner of experience. When, therefore, so conspicuous an

illustration of this neglect is furnished as has provoked these remarks, we believe it is high time for medical men to protest against it, and to state plainly that, from their standpoint, it is a folly which is almost a crime.

MEDICAL EDUCATION.

It is one of the most hopeful signs of the present time that the subject of medical education is attracting a great deal of attention, and that in our own country there is an unmistakable desire to find out and put into operation the best methods for the development of intelligent and successful practitioners of the healing art. A large part of the time of our medical societies is spent nowadays in discussing the plans proposed or followed by different medical schools in educating their students, and the columns of the *REPORTER* have, of late, frequently borne witness to the zeal of those who are striving to secure the highest efficiency of the schools, and to our own sympathy with the object they have in view. It will be understood, therefore, that we regard with much interest every carefully-considered contribution to this discussion, and think it proper to bring the subject to the notice of our readers again and again.

One of the most important addresses on medical education which has appeared of late was delivered by Dr. Ely Van de Warker before the Section on Obstetrics at the last meeting of the American Medical Association, and is published in the *Journal of the Amer. Med. Association*, August 11, 1888. The title of this Address is "How Gynecology is Taught"; but the author considers much more than his title covers, and his address opens up questions which affect the whole subject of medical education in the United States.

It would be impossible here to indicate all the matters to which Dr. Van de Warker alludes; but we wish to add our endorsement to an objection which he raises against

the tendency in some medical schools toward methods of education which are better theoretically than they are practically. Our own acquaintance with the methods of teaching followed in first-class medical schools does not lead us to share his idea that schools with graded courses of study exalt the textbook above the teacher; but we do believe with him that some of the best schools in the country are pursuing a course which tends to produce men who can pass brilliant examinations, rather than men who will be careful observers and shrewd thinkers. The disadvantages of the old seven-branch system of teaching need not be dwelt upon to justify the general opinion of its insufficiency for the requirements of the present day; but we believe that there will be a reaction from the sentiment which in our day would force all the schools in America to a standard of education which exacts so much of students as is indicated by the examination papers of schools like Harvard and the University of Pennsylvania. Such a standard we believe to be suited to only a very few schools, and utterly unsuited to the needs or conditions of most men who purpose entering upon the practice of medicine. Its fault, in our opinion, is that it attempts to cram into every head the wisdom of a whole faculty, and this in a space of time which is totally inadequate for any such purpose. Everyone who studied under the old seven-branch system knows how severe the strain was then upon the diligent student; and now, when the subjects of study are divided and multiplied until it is hard to say how many they are, the strain is well-nigh intolerable; beside this, some of the branches which were once only reasonably hard are pushed nowadays out of all proportion to the real needs of the student. Chemistry furnishes a good illustration of the fact. Once the student was expected to acquire a fair knowledge of physics and of general chemistry, but nowadays he is expected to fit himself to pass an examination which would make his father shudder,

and which would floor every one of his numerous examiners, except the professor of chemistry. So in physiology: the study of organs and tissues, of functions and disturbances, which sufficed for starting the teachers who now oppress him, was as nothing to the burden imposed by the modern experimental physiology, with its indescribable machinery and its wearisome details.

Let it not be supposed that we deprecate thorough study in chemistry or physiology, or that we fail to appreciate the advantage of a refined knowledge of both. But it seems to us that it is a mistake to push a whole class of medical students as if each member of it meant to be a specialist in these branches. This mistake appears the more striking when we look at the way in which anatomy is treated nowadays. The study of anatomy, in graded schools, is usually regarded as ended at the end of the second year. For two years the student gets what he can of anatomy, fighting hard against the exactions of chemistry, physiology, and materia medica, and then he is driven on the so-called practical branches for another year, to the utter exclusion of a branch which ought to be studied as long as he is within college walls.

Then, when we regard the question of modern medical education, and the strain upon students, we must consider the demands of the specialists. The teachers of gynecology, of ophthalmology, of otology, of dermatology, of pædiatrics, of orthopædics, and so on, feel very naturally the importance of giving medical men some preparation for practicing in each of their departments; and all of them are pressing to have their special branches made a part of this regular curriculum. But will human endurance bear the strain? Already the cry comes from some advocates of higher education that we must have an obligatory four-years' course. But it is easy to see that four years will soon be too short a time in which to cover the enlarged field of study, and so may six or ten years be, after a while.

Now, it is easier to make objections than to propose remedies; and we can see the disadvantages of trying to secure too much for and from students of medicine more clearly than we can the way to give them just enough of education to make them useful and contented men. But we believe that the majority of schools which give the degree of doctor of medicine will have to come to a standard which recognizes the fact that there is a limit to the possibilities of the average student, and that the duty of the schools is to give their students a reasonably good start, leaving them to perfect themselves by post-graduate and voluntary study, as their opportunities permit and the conditions under which they are to practice may demand.

How this shall be done is a very large question—too large to be discussed now. What we have said is meant rather to suggest a line of thought than to direct it. We all wish to reach the highest standard of medical education which is attainable; but it is worth while to consider seriously whether or not some of the energy nowadays devoted to securing a higher education is not misdirected and likely to do harm to the good cause in which it is enlisted.

THE RELATION OF PTOMAINES TO POISONOUS FOOD AND TO INFECTIOUS DISEASES.

Everyone who has endeavored to keep abreast of the wonderful advances made in the different departments of medicine within the last two decades has doubtless found his powers of memory and observation severely taxed. The modern system of specialisms, though doubtless fraught with some evils, has at least this advantage—that it enables its followers, by devoting exclusive attention to a single line of research, the more thoroughly to master their subject, and thus elicit new and important facts, which otherwise might escape notice.

We have been forcibly reminded of the

above truth by reference to the modern discovery of the ptomaines, and their elucidation by a number of distinguished scientists, among whom we are glad to place our countryman, Professor Vaughan, of the University of Michigan, the discoverer of one of the most important of these interesting bodies.

We have thought that our readers, some of whom may not have had the opportunity to examine this important subject, would be pleased to have a *résumé* of what appears to have been determined in connection with it.

As is well known, *ptomaines* (from *πτῶμα*, a dead body) are chemical basic substances, formed during the putrefaction of organic matters—chiefly animal. On account of their resemblance in many respects, both in their chemical and physiological characters, to the vegetable alkaloids, they have been also named *putrefactive alkaloids*.

The poisonous nature of putrid flesh, of certain varieties of mussels, sausages, cheese, and canned articles of food, etc., has long been a matter of experience. These substances, when eaten, frequently occasion most violent, and often fatal, results, resembling the effects of the acrid narcotic poisons—such as vomiting and purging, severe muscular pains, disturbed breathing, headache, stupor, delirium, dilated pupils, difficulty of swallowing, great prostration, convulsions, coma, and death. We read almost daily in the newspapers of such cases occurring after partaking of what were thought to be very innocent articles of food—such as milk, ice-cream, cream-puffs, canned provisions, etc. In these instances, as the symptoms usually resemble, in many respects, those of the ordinary mineral poisons, the search after arsenic, lead, tin, or copper, of course, proves unavailing, because of the absence of all of these last-named substances; the whole trouble has been caused by the presence of one or more of the noxious ptomaines, generated in the subtle process of the decomposition, or

spoiling, of the material that had unsuspectingly been used as food.

It is clearly understood that all these noxious articles of food produce their poisonous actions exclusively through the ptomaines, which are true chemical poisons, as much so as morphine, strychnine, atropine, and other recognized poisonous alkaloids. True it is that the putrefaction is the result of bacterial agency; but it has been distinctly proved that the peculiar symptoms are not due to the absorption of the bacilli into the blood, as was once supposed, nor are they dependent on the direct agency of these micro-organisms on any of the organs or tissues of the body, but on the ptomaines resulting from the action of these bacteria upon the highly-organized material. The kind of ptomaine produced will depend on (1) the specific bacterium engaged in its formation; (2) the stage of putrefaction, ptomaines being transition-products, rapidly undergoing transformation; (3) external conditions, as temperature, supply of oxygen, etc. Although many of these products are poisonous, as just mentioned, the majority of them are innocuous.

What is of special interest to the toxicologist in this relation is the curious fact that these poisonous ptomaines bear a very close resemblance, both in their chemical and physiological behavior, to the well-known vegetable alkaloids. For example, several bodies have been isolated from decomposing human flesh, and one from decomposed corn-meal, that gave crystalline precipitates with certain chemical reagents, and yield also the usual color-test of strychnine; some of these also caused tetanic spasms when injected into frogs. Another ptomaine bears some resemblance to morphine, reducing iodic acid, but failing in other tests. Two volatile oily ptomaines have been extracted by different chemists from various kinds of animal putrefactive matters, bearing a considerable likeness to the volatile vegetable alkaloids, nicotine and coniine. And there are still others which exhibit many of the

properties of the well-known mydriatic alkaloids, atropine, duboisine, and hyoscyamine, causing, when injected into animals, dilatation of the pupil, increased action of the heart, and paralysis of the muscles of the intestines. Besides the above, other putrefactive alkaloids might be mentioned, such as bodies resembling digitaline, colchicine, veratrine, etc. Indeed, there would seem to be no limit to the number and variety of these singular compounds, since they are so very unstable and prone to chemical transformations.

The important practical medico-legal inference to be deduced from the foregoing facts is the danger of mistaking one of these ptomaines for one of the vegetable alkaloids in a case of alleged poisoning by the latter. As we have seen, there is quite a remarkable resemblance between the two, both in their chemical reactions and in their physiological properties. Before the discovery of these ptomaines, there was, comparatively speaking, no difficulty for the toxicologist to detect most of the well-known alkaloidal poisons; now, however, there must always be more or less uncertainty in the result of such an investigation, especially if made on a putrefied corpse. At all events, it will behoove the expert to exercise the greater caution in his examination, especially in a capital case, so as to be able *positively* to exclude the presence of any of these interfering ptomaines in his ultimate results, on which he founds his opinion as to the existence or non-existence of the alleged lethal poison in the body of the deceased. And it is very easy to see what a powerful weapon this *doctrine of the ptomaines* furnishes to the skillful counsel for the defense in a criminal trial for alkaloidal poisoning, and how likely he will be to use it before the court and jury to confuse and embarrass, if not completely to break down, the testimony of the experts for the prosecution. But, fortunately for the cause of justice, here as elsewhere truth "will prevail." The resemblance between the ptomaines

and alkaloids, although strong, does not amount to an absolute identity. There are certain special points of distinction between the two substances fully appreciated by the skilled toxicologist, which, if he exercise sufficient caution, will enable him to make a satisfactory diagnosis. These points of difference we are not able at present further to notice. They will be found, however, in most of the recent monographs on this subject.

One other fact here deserves attention, namely, that the simultaneous presence of one or more of these ptomaines with one of the vegetable alkaloids, in a dead body, will sometimes have the effect of partially or completely concealing the usual characteristic chemical tests for the last-named poisons. This circumstance may satisfactorily explain the cause of the occasional failure to discover an alkaloidal poison in the dead body.

The relation of ptomaines to infectious diseases opens up a most interesting field for discussion, but our limits only permit a hasty glance at some of the more prominent points.

The bacterial origin of infectious diseases is now almost universally admitted; indeed, the results obtained by following out rigidly the rules laid down by Koch would seem to leave no doubt on this point in a few special diseases, at least. As might be expected, different theories have been broached to explain how these little germs produce the disease after they have gained an entrance into the system. The oldest of these theories referred the cause to the deoxidation of the blood through the direct agency of the bacilli, which were said to be present in immense numbers in that fluid. Another assigned it to the accumulation of these bacilli in the blood-vessels, acting mechanically like emboli, and interfering with the circulation of important organs. Still another supposition was that the micro-organisms destroyed the integrity of the blood-corpuscles, and thus devitalized the blood.

But all these blood-theories have been disproved by numerous investigators, and are now abandoned; and they have given place to what may be termed the chemical theory, which may be briefly formulated thus: Each specific bacillus, acting upon the complex organic material (as in the case of putrefaction), produces therefrom poisonous ptomaines, which are absorbed into the circulation just as ordinary poisons, and produce their peculiar impression upon the centres of life—the heart, lungs, brain, and great nerve-ganglia. It will now be understood that each infectious disease has its own specific pathogenic micro-organism, which, having gained admittance into the body under favorable conditions, grows and multiplies, and, in so doing, elaborates a special ptomaine—a chemical poison—which produces its characteristic effects.

That this is not mere hypothesis is shown by numerous experiments, in which, by pure culture of the different specific bacilli, the various corresponding ptomaines were subsequently procured by chemical processes; and, when these ptomaines were injected into the lower animals, many (though not all) of the symptoms peculiar to the specific disease were exhibited. This has been proved in the case of bacteria of anthrax, tetanus, and typhoid fever, in each of which the pathogenic ptomaine has been extracted, and shown to be active in the subsequent production of the characteristic symptoms in a living animal. It has not yet been verified in all infectious diseases, though the probabilities are in favor of its general application.

Much more might readily be written upon this very interesting subject, did our time and space justify it; but enough has been said to stimulate our readers to a farther pursuit in this line of investigation. It is especially suggestive to the toxicologist and the pathologist, and it should not be the less so to the therapist, as it opens up an inviting opportunity for the exhibition of antidotal or antagonistic remedies.

ANTISEPTIC MIDWIFERY IN PRIVATE PRACTICE.

The theory of Semmelweis, of the nature of puerperal septicaemia, with its modern development and deductions, has obtained general recognition and acceptance. The question whether or not antiseptics shall be adopted in private obstetric practice presents itself to the practitioner from several points of view. In the past, sepsis has been much more prevalent and fatal in hospital than in private practice. This is by no means so true at present. Antiseptic midwifery has done much to reduce this disparity; indeed, it is more than probable that puerperal septicaemia is more fatal to-day in private practice than in well-conducted hospitals. If this is true, the practitioner can no longer ignore this question. His patient's interests demand that he shall adopt as perfect a system of antiseptics as circumstances will permit. Practical men are aware that it is impossible to adopt a method that can be carried out in all cases. But it is always possible to practice personal disinfection, and, except among the ignorant, to see that the nurse does the same, before touching the genitals. These simple measures, in addition to the methods of cleanliness practiced among the better classes, would reduce very greatly the occurrence of sepsis. It is usually possible to do more than this, and a simple yet efficient method of antiseptics should be adopted. We know of no systematic method better adapted to use in private practice than that employed at the Philadelphia Lying-in Charity (REPORTER, March 31, 1888). We do not believe that the most earnest efforts on the part of the physician will always succeed in preventing sepsis in private practice; nor is it likely that relatively as beneficial results will be obtained in private as in hospital practice, for the reason that neither the patient nor her environment is so absolutely under his control.

Our conservative views are not shared by all, and, owing to the radical position held

by some, this subject has recently assumed importance from a medico-legal aspect. We doubt not that in the near future some practitioner who has been so unfortunate as to lose a patient from puerperal septicæmia will be sued for damages upon the plea of malpractice. In the discussion upon Dr. Adams's paper on "Antiseptic Midwifery," read before the Essex North Dist. Med. Society (*Boston Med. and Surg. Journ.*, March 1, 1888), Prof. Wm. L. Richardson, of the Boston Lying-in Hospital, expressed himself very forcibly on this subject. He considers peritonitis, milk-fever, swelled legs, mammary abscess, sore nipples, pneumonia, or an elevation of temperature above 100° F., during the puerperium, as evidences of septicæmia; and that the physician is responsible if death occurs from any of these causes. He thinks that, should a case go to court, "it will go hard with a physician unless he can succeed in shifting the responsibility on to the nurse." This opinion is partly based on the results of antiseptic midwifery in the Boston Lying-in Hospital, under which there have been nine hundred deliveries without a death from sepsis, while before the antiseptic era the mortality was always high, and it was sometimes necessary to close the hospital. Dr. Jaggard expressed similar views in the discussion of Dr. Hoag's paper on "The Importance of Abdominal Palpation in Obstetrical Diagnosis," read before the Gynecological Society of Chicago (*Amer. Journ. Obstet.*, p. 1210 *et seq.*, Nov., 1887). This subject was also discussed before the Chicago Medico-Legal Society, March 3, 1888.

At this time, it is scarcely necessary to do more than allude to the importance of antiseptic methods to the patient. The present status of this question is of peculiar interest to the physician. He must use antiseptic methods not only for conscience' sake, should he lose a patient from puerperal septicæmia, but that he may be able to justify himself in court, in case of a suit for malpractice.

NEW YORK QUARANTINE.

The defects of the New York Quarantine Station are once more attracting the notice of the country. The last demonstration of the way in which it is managed consisted in the death of two men from yellow fever, in a Cuban vessel, while it was lying unsuspected at a dock in Brooklyn, after it had been passed through the hands of the Health Officer.

Such an occurrence as this adds renewed force to what we have before said of the necessity that the General Government shall take charge of the quarantine of the whole coast, and not leave it to each State to manage or neglect, as may happen. When the most important port in the United States gets itself into notoriety for the carelessness with which it guards against the invasion of disease by means of ships, it is high time that the regulation of the quarantine of that port, at least, should be taken out of its hands and confided to more faithful or more competent ones.

BOOK REVIEWS.

[Any book reviewed in these columns may be obtained upon receipt of price, from the office of the REPORTER.]

CHEMICAL PROBLEMS. By J. P. GRABFIELD, Ph.D., and P. S. BURNS, B.S., Massachusetts Institute of Technology, Boston, Mass. Small 8vo, pp. 87. Boston: D. C. Heath & Co., 1888.

This little book contains no preface and no explanation why it was prepared. It is to be inferred, however, that it was intended to be used as a guide to work in chemistry in the Massachusetts Institute of Technology and elsewhere, if deemed suitable to instructors in this branch of science. Those who need such works will judge its merits for themselves. To us, it appears to be a capital book, and well suited to furnish an outline of a course of study in chemistry for those who have already become familiar with its elementary details. It is not a book for neophytes, by a great deal, and it makes one who learned what he did of chemistry in the old-fashioned way tremble to read the questions contained in the examination-papers here published.

Happily for those who shall use this book, it is admirably written; the statements made are clear and succinct, and the plan pursued is logical and interesting. We have no doubt that the book will serve a useful purpose, and contribute to the reputation of its authors. Its mechanical execution is very creditable to the publishers—paper, printing, and binding being excellent.

PAMPHLET NOTICES.

[Any reader of the REPORTER who desires a copy of a pamphlet noticed in these columns will doubtless secure it by addressing the author with a request stating where the notice was seen and enclosing a postage-stamp.]

THE RESULTS OF LAPAROTOMY FOR ACUTE INTES-
TINAL OBSTRUCTION. BY B. FARQUHAR CURTIS,
M.D., New York. From the *Transactions of the*
Med. Soc. of the State of New York for 1888.
24 pages.

ARE DIPSOMANIA, KLEPTOMANIA, PYROMANIA, ETC.,
VALID FORMS OF MENTAL DISEASE? BY ORPHEUS
EVERTS, M.D., Cincinnati. 8 pages.

ANNUAL REPORT OF THE SUPERINTENDENT OF THE
CINCINNATI SANITARIUM FOR THE YEAR END-
ING NOVEMBER 30, 1887.

THE TRITURATION OF ALKALOIDS. BY EDWARD
PYNCHON, M.D., Chicago. From the *Western*
Medical Reporter, May, 1888. 8 pages.

ETIOLOGY OF TYPHOID FEVER, AS OBSERVED IN
COUNTRY PRACTICE. BY L. N. DAVIS, M.D.,
Farmland, Ind. From the *Journal of the Amer.*
Med. Association, April 21, 1888. 8 pages.

—Dr. Curtis has analyzed and studied the results of laparotomy performed for the relief of intestinal obstruction in 328 cases, and gives in his pamphlet the details of his analysis and the conclusions to which his study has led him. These conclusions are identical with those of other surgeons who have given much attention to the subject, namely, that the high death-rate—58 per cent.—is attributable largely to delay in operating, and the consequent bad condition of the patients; and that early and rapid operations would probably reduce the death-rate materially.

We can strongly recommend his paper to the consideration of our readers, and especially to those who do not practice surgery, since the responsibility for the result of an acute obstruction of the bowels usually rests with them.

In conclusion, it is pleasant to note the admirable literary style of this pamphlet, in which we have noticed only one thing to which we would take exception: the use of the pronoun "we" for "I."

—In opening a discussion on this question, before the Association of Medical Superintendents of American Institutions for the Insane, at Detroit, in June, 1887, Dr. Everts stated his opinion that an uncontrollable impulse to use stimulants, to steal, to burn, etc., does not develop independently of other evidences of insanity. From the observations of an extensive experience, and a purely scientific study of the subject, he believes that these morbid tendencies are usually associated with other evidences of perverted mental action, which leave no doubt as to the diagnosis; and that, when they are not so associated, great care should be exercised in classifying them.

This view appears to us to be entirely sound, and we believe that a proper appreciation of it, as explained by Dr. Everts, would be of great value in correcting a tendency, which was strikingly exemplified in the late Dr. Beard, to confuse the study of insanity by the use of terms which are misleading to those who are not aware of their proper restrictions.

—In this report Dr. Everts states that, out of two hundred and forty-four patients treated during the year, ninety-five were discharged cured, forty-two improved, and thirty-two unimproved; while six died,

and sixty-nine remained under treatment. This interesting statement is followed up by further statistics, and by explanations which bear unusual marks of candor and courage. As a whole, the report is exceedingly creditable to the management of this institution, and the superintendent may well be congratulated upon it.

—Dr. Pynchon is a firm believer in the advantage of preferring the use of alkaloids to that of crude drugs in the treatment of disease, partly on the score of scientific exactness, and partly because it facilitates the dispensing of drugs directly by physicians instead of calling in the pharmacist as an intermediary between him and the patient. In his pamphlet, he states very forcibly the reasons which lead him to his belief, and proposes the plan of triturating various alkaloids with sugar-of-milk in such proportions that three grains of the mass shall contain an average adult dose. His plan is similar to that adopted by certain manufacturing chemists, and has much to commend it. Even more might be said than he has said in its favor; but he says enough to show that it deserves the careful attention of medical men, and especially of those who practice in small towns and rural districts.

—Dr. Davis, in this pamphlet, makes a very valuable contribution to the study of the etiology of typhoid fever. It is true, he raises questions to which he can give no answer; but he does give a very clear and intelligent description of the circumstances of a series of connected cases of typhoid fever, which seem to exclude a factor to which the greatest importance is usually attributed, and to emphasize the danger of another which is generally regarded as of less moment. Dr. Davis is evidently not carried away by the germ-theory of the origin of typhoid fever, and but little disposed to the short and easy way of accounting for its occurrence which too many medical men adopt.

We call especial attention to his paper, because it may serve as a model to many men whose opportunities of observation are large, but whose inclination to write is small. Such carefully studied cases as he has put on record in this paper are of the greatest value, and we wish there were more of them.

LITERARY NOTES.

The magazine called *Woman* has passed into its second volume, with steady improvement in its literary contents. The number for June contains a very good paper by Charles Richards Dodge, entitled "Hints on Physical Culture for Our Girls," well illustrated, and calculated to be useful. Another interesting feature of this number, to which attention may be called, is the department called "Helps and Hints for Mothers." The whole is full of instruction and entertainment. Some of the advertisements will not be approved by medical men, but the inside pages are admirable.

The name of the *Canada Medical and Surgical Journal* has been changed to the *Montreal Medical Journal*. It has been enlarged in size from sixty-four to eighty pages, and the subscription reduced to \$2.00 per annum.

Dr. Matthew Woods's book, descriptive of the art and literary centres of the Old World, from London to Rome, by way of the Rhine, with incidents by the way, is now ready for the press, awaiting only the work of the illustrators.

CORRESPONDENCE.

Management of the New-Born Child.

TO THE EDITOR.

Sir: Having read with interest the article from the pen of Dr. Ady in the REPORTER of July 28, 1888, and knowing that nothing is more gratifying to a writer than friendly criticism, I will devote a few thoughts to the article in question. Dr. Ady is not alone in his notion that he has peculiar ideas about the management of the new-born infant; careful reading of his article would lead anyone to the same opinion. At first sight the discarding of a woolen for a *canton* flannel slip (for *canton*, not cotton, is evidently meant) seems plausible, were it not that hundreds of years of experience bear testimony that wool warms and stimulates the newly-born in various ways, not the least important of which is the very irritation of which Dr. Ady complains.

I personally know of many robust young men and women, who to my personal knowledge kicked their toes for the first time against the woolen petticoat. *Light* dressing is certainly commendable, and his custom as to diaper and slip, depending on other wraps for warmth, is a good one, excepting the want of a band, of which more anon. His theory as regards the cord is not so good. If there is danger of blood oozing, which I doubt, would it not be much better to leave enough cord to tie again in case of such accident? Why not follow nature's plan, and leave enough cord to contract from exposure to the air, and thus prevent hemorrhage? Sepsis, as well as hemorrhage, is at a minimum. I have in my mind a careful old gentleman, dead now, who, in a country practice of 22 years, tied cords in 1140 cases, always 3 or 4 inches from the body, enclosing them in a greased cloth, never having had any trouble with the cord in that time. In my own case, I have never had either hemorrhage from the cord after tying it, or ulceration, but once, and that in a scrofulous child.

Dr. Ady's habit of not binding the abdomen has more of barbarism in it than the use of the belly-band has. The laparotomist teaches that the abdomen must be steadied by a bandage after any disturbance has been made of its contents. At the umbilicus there is pregnant cause for trouble, unless it is held in quietude by a bandage. Dr. Ady will admit the neat figure of our own Indian tribes who bind the children, abdomen and all, in infancy, while the

pot-bellied native African, who runs like a partridge almost from birth, may be a sample of the doctor's enlightenment. In his first fifteen years, he lost two from bleeding at the cord, several from hernia, but he does not state the kind. Having become wiser, he discards bandages, woolen slips, and ligatures, and comes up smiling with a bare umbilical rupture in 20 years. So in 35 years he has 2 dead babies from hemorrhage, one umbilical rupture, several other ruptures, and nothing else. This is a good showing; but how many physicians with belly-band, old fashioned ligature, and comfortable woolen clothing can make just as good if not a better showing? Their name is Legion. No, Brother Ady, you must give better reasons why the baby should not be kept warm, why the cord should not be tied a few inches from the abdomen, and lastly, why its abdomen should not be supported until the cord has dropped off, the umbilicus healed, and the abdominal parietes accustomed to their changed relations.

Yours truly,

JAMES BATES, M.D.

Alliance, O.,

August 13, 1888.

More About Snake-Bite.

TO THE EDITOR.

Sir: Dr. S. A. Kemp, of Callicoon Depot, N. Y., is a good doctor, but very bashful. He has called my attention to a case, in his practice, of snake-bite cured by poultices of indigo and salt to the wound, together with the internal use of the leaves of the blue violet (*V. sagittata*), and he asks me to report this to you, because he dreads to approach the editorial throne. I take pleasure in doing so. The remedy is an old one, and may, doubtless, be good in certain cases; but I know it to have failed in our own State. Apropos of the subject, the letter from Dr. Milner, in the REPORTER which contained mine, was curious, as exactly reversing the opinion held by myself. Now, with all due deference to the doctor, I differ from his view, holding that the *acidity* of the virus of serpents, which he dreads, is not the toxic principle; hence alkalies, *per se*, are useless. The venom is an *arterial and nerve depressant*, and we require, therefore, a *stimulant* as an antidote. We administer freely nitro-muriatic acid with impunity, although it is more than a hundred times more acid than snake-virus. It does not, however, contain any special toxic principle; and I may say, in passing, that a specimen shown me of the isolated

crystal, stated to be the poison itself from the crotalidæ, was not acid in reaction; it was deemed an alkaloid. Permanganate of potassium is not strongly alkaline, neither is bromine as found in Bibron's antidote. Aromatic spirits of ammonia is too fugacious, and it also is not a violent alkali. Deaths from snake-bite are invariably the result of profound depression, not paralytic in effect. Dr. Milner is right in giving digitalis, but where his emetic comes in as eliminating or modifying a poison injected directly into the circulation goes beyond my comprehension.

I do not see the force of his analogy between strychnia and serpent-venom, nor the necessity for its introduction. The dose of strychnia administered by a physician is known, but the snake don't invite confidence; he gives the largest available quantity, and leaves no memoranda. We must, so to speak, feel our way. Any poison must be neutralized instantly when presented through a wound at the point of entrance. Once distributed through the circulation, we cannot saturate the blood-mass with specific antidotes; as, for example, alkali *versus* acid, or *vice versa*. We must, then, combat the effect of the poison on the blood, the nervous system, the respiration, etc., as indications demand. Fatal snake-bites are comparatively rare, but experience has overwhelmingly shown that strong and prompt stimulation is demanded and is uniformly successful, whilst chemical experiments frequently fail. Indigo has, I know, experimentally been useful, but it was instantly applied. So have many other agents. When we have to deal with an absorbed poison, fully active, then we must treat upon foundation principles. The mild acid in snake-venom does not appear to be the lethal agent, hence we must look out for not only alkalinity (which is perfectly proper and can do no harm in moderation), but aim to reinforce the vital power during the period of prostration by such agents as we know will tide the patient over. The virus liquefies the blood strongly in fatal cases. Be it remembered that alkalies have the same effect in large doses or when long continued.

Yours truly,

W. R. D. BLACKWOOD, M.D.

Philadelphia,

August 7, 1888.

—In October, 1888, an Italian Congress of Hydrology and Climatology will assemble at Bologna, under the presidency of Professor Murri.

NOTES AND COMMENTS.

American Dentists in London.

A cable-dispatch to the *N. Y. Evening Post*, August 15, 1888, says that the proceedings against Drs. Huntley and Coe, two American dentists practicing in London, bring to light a curious hardship of certain Americans belonging to their profession. Until a few years ago, anybody could practice in England as a dentist. But Parliament passed an act in 1878 instituting a system of examination and registration. Under this, certain foreign diplomas are recognized, but, in the case of Americans, only those of Harvard and the Michigan schools. Drs. Huntley and Coe had diplomas of Pennsylvania and Boston schools. The British Dental Association, taking advantage of the wording of the act, summoned them to a police court yesterday for practicing without qualification. Mr. Waddy, an eminent Queen's counsel who appeared for the defendants, urged with much good sense that the act was never intended to exclude properly qualified men. The magistrate reserved decision. It is quite likely the act will have to be amended. Serious injustice is being done meantime.

Conversion of Mercuric Chloride into Calomel.

The conversion of mercuric chloride into the mercurous salt (calomel) in compound syrup of sarsaparilla was the subject of a paper read before the Indiana Pharmaceutical Association by Samuel Kennedy, of Shelbyville. The addition of 4 grains of corrosive sublimate, free from mercuric chloride, to two fluid ounces of the compound syrup of sarsaparilla, as well as to the same quantity of a watery infusion of each of the drugs entering into the composition of the syrup, showed, after standing ten days, considerable variously colored precipitates, and, upon testing, the presence of calomel was determined. With the addition of 12 grains of the mercuric chloride to the same quantity of similar specimens, the reduction into mercurous chloride was still more marked; but it was greatly retarded by the addition of an equal quantity of salt. Sodium chloride seems to facilitate the solution of the mercuric chloride, and the author thinks it advisable to add it in equal proportion to such mixtures.—*Western Druggist*, July, 1888.

Leprosy in Chicago.

August Johnson, a Dane, aged 21 years, was admitted to the County Hospital at Chicago on August 16, suffering from tubercular leprosy. Johnson came to this country when three years old, and enjoyed good health until eight months ago, when the loathsome disease appeared in the form of a small red blotch on his right loin. He is now covered with tubercles. The origin of the disease is a mystery to the Chicago physicians.

American Climatological Association.

The fifth annual meeting will be held in the Grand Army building, Pennsylvania Avenue between Fourteenth and Fifteenth Streets, N. W., Washington, D. C., September 18, 19, and 20, 1888, in connection with the Congress of American Physicians and Surgeons. The following is the official programme:

Tuesday, September 18, afternoon session, 2.30 o'clock: The President's Address, Dr. A. L. Loomis, New York. After this, the following papers will be read: A Study of the Climate of Colorado as Applied to the Arrest and Cure of Pulmonary Disease, by Dr. S. A. Fisk, Denver; Invalids Suited for Treatment at Colorado Springs, by Dr. S. E. Solly, Colorado Springs; Is Climate an Etiological Factor in Graves's Disease? by Dr. R. G. Curtin, Philadelphia; Health-Resorts vs. Institutions, for the Treatment of Pulmonary Consumption, by Dr. P. H. Kretzschmar, Brooklyn.

Evening session with Congress: Papers on Intestinal Obstruction in its Medical and Surgical Relations will be read by Dr. Reginald H. Fitz, Boston, and Dr. Nicholas Senn, Chicago, Ill.

Wednesday, September 19, morning session, 10 o'clock: The Influence of Semi-Tropical Latitudes on Types of Diseases, by Dr. John Guitéras, Charleston.

The discussion on The Relative Importance of Different Climatic Elements in the Treatment of Phthisis will be opened by Dr. E. T. Bruen, Philadelphia, and Dr. V. Y. Bowditch, Boston; Indications and Contra-Indications for Altitude in Treatment of Phthisis, by Dr. F. I. Knight, Boston; An Environment Experiment Repeated, by Dr. E. L. Trudeau, Saranac Lake; An Epidemic of Cerebro-Spinal Meningitis in Central New York, by Dr. W. T. Ford, Utica; The Physiology of Respiration in High Altitudes, by Dr. F. Donaldson, Jr., Baltimore.

Afternoon session, 2.30 o'clock: Report of the Committee on Mineral Springs, by Dr. C. C. Rice, New York, the Chairman; Therapeutic Value of Mineral Waters: In Gastro-Hepatic Diseases, by Dr. Wm. Pepper, Philadelphia; In Urinary and Arthritic Diseases, by Dr. A. H. Smith, New York; In Malarial Diseases, by Dr. W. C. Van Bibber, Baltimore. The Therapy of Ocean Climate, by Dr. A. L. Gihon, U. S. N. A banquet will be given at 6.30 P.M. Members may send their names to Dr. Bosworth, 26 West 46th Street, New York.

Evening session with Congress: Papers on Cerebral Localization in its Practical Relations will be read by Dr. Chas. K. Mills, Philadelphia, and Dr. Roswell Park, Buffalo.

Thursday, September 20, morning session, 10 o'clock: Conditions which Tend to Render the Atmosphere of a Locality Aseptic, by Dr. J. T. Whittaker, Cincinnati. The discussion on The Relation of the Nasal and Neurotic Factors in the Etiology of Asthma will be opened by Dr. Frank Bosworth, New York, and Dr. E. L. Shurly, Detroit; Climate and Bright's Disease, by Dr. J. C. Wilson, Philadelphia; Therapeutic Differences of Mountain and Sea Air, by Dr. W. H. Geddings, Aiken; Climatic Characteristics of Texas, by Dr. Morse K. Taylor, U. S. A.; Climatic Characteristics of Roan Mountain, East Tennessee, by Dr. C. Y. Kenworthy, Jacksonville; Weak Hearts as Affected by Climate and Temperature, Dr. J. J. Levick, Philadelphia; Temperature and Relative Humidity, and their Relation to Health and Disease, by Dr. J. M. Anders, Philadelphia.

Afternoon session, 2 P.M.: The first part of this session will be devoted to business.

Interpleural Pathological Products: their Cause, Significance, and Specific Relationship to Pulmonary Phthisis, by Dr. J. R. Leaming, New York; The Management of Phthisical Patients Undergoing Climatic Treatment, by Dr. I. H. Platt, Lakewood; Further Contribution to the Study of Consumption among the Indians, by Dr. W. Matthews, U. S. A.; Observations on the Use of Terebene, by Dr. D. M. Cammann, New York; Notes of a Summer in Switzerland, by Dr. D. B. St. John Roosa, New York; The Climate of Colorado, by Dr. W. A. Jayne, Georgetown, Col.

Evening session: Address of President of the Congress, Dr. J. S. Billings, U. S. A., after which there will be a general reception in the Army Medical Museum Building.

NEWS.

—Black measles of a most virulent type is said to have broken out among the negroes on the rice plantations on Santee River, S. C. Fifty deaths have already occurred.

—On August 20, M. Pasteur read before the Academy of Sciences a letter from Dr. Gamaleia, of Odessa, announcing the discovery of cholera vaccine. The announcement was favorably received.

—Up to August 27 there have been about 115 cases of a disease which local physicians call "typhoid malaria" in Bristol, Rhode Island, and about 12 deaths. The cause of the epidemic is said to be due to impure milk and water and a defective sewage-system.

—Surgeon General Hamilton has directed Dr. Stratton to inspect the trains between Washington and Alexandria, and to examine the tickets in order to discover all passengers coming from the fever-infected points intending to stop over in Washington. Such persons will be closely watched. It is not intended to quarantine the city, but to keep a lookout for refugees.

—The number of deaths in Philadelphia for the week ending August 25 was 454, which was an increase of 15 over the previous week, and of 36 over the corresponding period of 1887. Of this number, 143 were children under one year of age, and 210 were adults, and 244 minors. Of this number, there were 44 from cholera infantum and 41 from typhoid fever.

—The Marine Hospital Bureau is informed that there are now under treatment at Jacksonville, Florida, 62 cases of yellow fever. There have been 107 cases up to August 27. The deaths have numbered 17; discharged cured, 28; still under treatment, 62. Many of those under treatment are convalescing. A death from yellow fever is reported at Fernandina, and the bureau has authorized the mayor of Savannah to send an inspector to that place.

—In connection with our editorial on the Morris Plains Asylum, REPORTER, July 28, it may be of interest to our readers to learn that Dr. Edward C. Booth, who has been Medical Director of the New Jersey State Asylum for the Insane, at Morristown, has resigned. He states, in his letter to the Board, that he is constrained to this action by inability to effect needed reforms in the medical department of the asylum, owing to the opposition of the warden and certain members of the Board.

HUMOR.

BILL NYE, THE HUMORIST, sent the following brief dispatch in reply to an invitation to attend the recent banquet of the Indiana State Medical Society: "Sorry I cannot be there. May you and your associates continue to *take life* easily, as heretofore."

PAY YOUR SUBSCRIPTION.—An exchange relates this parable: "A revivalist requested all in the congregation who paid their debts to rise. The rising was general. After they had taken their seats, a call was made for those who did not pay their debts, and one solitary individual arose and explained that he was an editor and could not pay because all the rest of the congregation were owing him their subscription to his paper."

METROPOLITAN EDITOR: Think you need change and rest, eh? Well, I shouldn't wonder; city life is a hard one, taking it all the year round, and I believe it is several years since you had a vacation. Which do you most enjoy: seashore, mountains, or pastoral scenes? Hard-worked Reporter (with enthusiasm): Oh, the mountains, always. Editor: Well, the Mind and Matter Association will hold its sixteen-hour-a-day metaphysical sessions at the Bleak Top this year, and you can go there and report them. Don't miss anything, and keep each day's essays down to six or eight columns. The paper has a bill against the hotel-keeper at Bleak Top for advertising. I will charge it to your account and let you take it along. Just before leaving, hand him the bill in payment for your board; but be careful and do it politely, because he's a retired prize-fighter and the wickedest man east of San Francisco.—*Omaha World*.

OBITUARY.

JOHN MILLER, M.D.

Dr. John Miller, of Andover, N. J., died August 8. He was seventy-two years old, and was graduated from the College of Physicians and Surgeons, New York, in 1846.

JOHN F. MURPHY, M.D.

Dr. John F. Murphy died in New York City, August 12. He was a graduate of the Georgetown Medical College, of the class of 1873.

THOMAS J. GALLAGHER, M.D.

Dr. Thomas J. Gallagher, a prominent physician of Pittsburgh, who was graduated from the University of Pennsylvania in 1849, died August 21, aged sixty-six years.